

REAGENTS



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NOTES

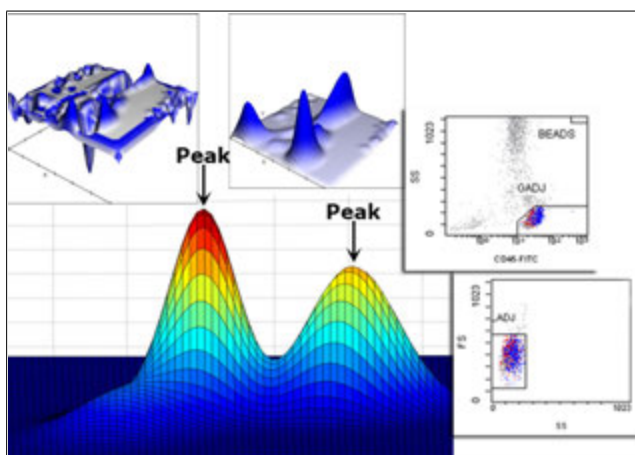
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SYSTEMS AND KITS

Navios tetra System

Get the fast answers you need for timely, confident treatment decisions with the proven reliability and precision of Beckman Coulter's Navios tetra system for simultaneous identification and enumeration of T, B and NK lymphocytes in whole blood. Now available for the Navios flow cytometer, Navios tetra system delivers an easy-to-use solution for multicolor flow cytometric analysis of lymphocyte subsets as well as CD4+ and CD8+ T cell subsets ratios. Navios tetra system's fully automated instrument set-up, easy sample preparation, innovative cluster tracking, and single platform standardization help streamline your workflow. At the same time, the absolute count robustness and on-board quality control tracking helps you make confident treatment decisions.

Fully automated instrument set-up using our Flow Check Pro and Flow Set Pro Fluorospheres provides fast automated instrument set up. Reduce sample processing time with ready-to-use pre-optimized reagents that make sample preparation easy and reduce sample handling with no wash protocol and improve laboratory safety.



Optional Bi-Directional LIS connectivity with Data Innovations Instrument Manager streamlines data entry and reporting.

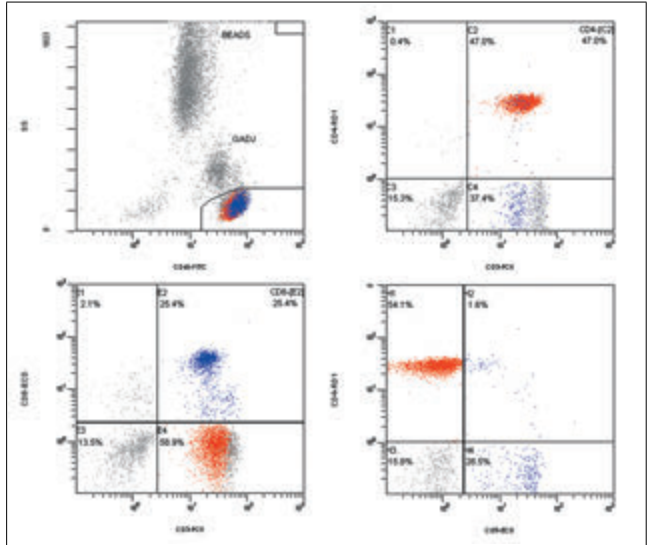
	Size	Status	Part #
Flow-Check Pro Fluorospheres		IVD & CE	A63493
Fluorospheres (10 µm; 6 µm; 3 µm)	-	3 vials	10 mL/vial
Flow-Set Pro Fluorospheres		IVD & CE	A63492
Fluorospheres (3 µm)	-	3 vials	10 mL/vial
QuickCOMP 4 Kit		IVD & CE	177017
CD45-FITC	-	1 vial	50 tests
CD45-PE	-	1 vial	50 tests
CD45-ECD	-	1 vial	50 tests
CD45-PC5	-	1 vial	50 tests
CYTO-COMP Cell Kit		IVD & CE	6607023
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
IMMUNO-TROL Cells		IVD & CE	6607077
Quality Control Product	-	2 x 3 mL	60 tests
IMMUNO-TROL Low Cells		IVD & CE	6607098
Quality Control Product	-	2 x 3 mL	60 tests
CYTO-TROL Control Cells		IVD & CE	6604248
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
tetraCHROME CD45-FITC/CD4-PE/CD8-ECD/CD3-PC5	50 tests	IVD & CE	6607013
tetraCHROME CD45-FITC/CD56-PE/CD19-ECD/CD3-PC5		IVD & CE	6607073
Flow-Count Fluorospheres		IVD & CE	7547053
Fluorospheres (10 µm)	-	1 vial	20 mL/vial
Navios tetra Software		IVD & CE	775213

SYSTEMS AND KITS

tetraCXP SYSTEM

The tetraCXP SYSTEM provides a fully automated Windows* based device for enumeration of CD3⁺CD4⁺ and CD3⁺CD8⁺ lymphocytes from whole blood in a single tube. This system, exclusively available on the FC 500 flow cytometer with CXP Software, consists of a set of reagents and the tetraCXP Software which features:

- all protocols required for cytometer set-up, standardization and verification for 4-color analysis.
- automated algorithm combines information from 4 parameters (Forward Scatter, Side Scatter and CD45 and CD3) to generate a 3 dimensional lymphocyte gate.
- direct display of total CD3⁺, CD3⁺CD4⁺, CD3⁺CD8⁺, CD19⁺ and CD3⁺CD56⁺ percentages and absolute counts as well as CD4/CD8 ratio and percentage of total lymphocytes in real time.
- automated cursor placement allows analysis of lymphocyte components.



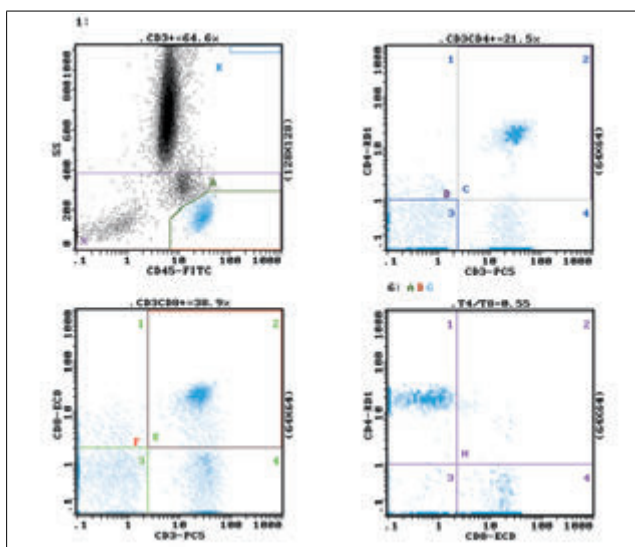
	Size	Status	Part #
tetraCHROME CD45-FITC/CD4-PE/CD8-ECD/CD3-PC5	50 tests	IVD & CE	6607013
tetraCHROME CD45-FITC/CD56-PE/CD19-ECD/CD3-PC5	50 tests	IVD & CE	6607073
Flow-Check Fluorospheres	10 mL/vial	IVD & CE	6605359
Fluorospheres (10 µm)	-	3 vials	10 mL/vial
Flow-Set Fluorospheres	10 mL/vial	IVD & CE	6607007
Fluorospheres (3.6 µm)	-	3 vials	10 mL/vial
CYTO-COMP Cell Kit	50 tests	IVD & CE	6607023
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
QuickCOMP 4 Kit	50 tests	IVD & CE	177017
CD45-FITC	-	1 vial	50 tests
CD45-PE	-	1 vial	50 tests
CD45-ECD	-	1 vial	50 tests
CD45-PC5	-	1 vial	50 tests
Flow-Count Fluorospheres		IVD & CE	7547053
Fluorospheres (10 µm)	-	1 vial	20 mL/vial
CYTO-TROL Control Cells		IVD & CE	6604248
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
IMMUNO-TROL Cells		IVD & CE	6607077
Quality Control Product	-	2 x 3 mL	60 tests
IMMUNO-TROL Low Cells		IVD & CE	6607098
Quality Control Product	-	2 x 3 mL	60 tests
tetraCXP SYSTEM Software	-	IVD & CE	Please call

SYSTEMS AND KITS

tetraONE SYSTEM

The tetraONE SYSTEM provides a fully-automated device for enumeration of CD3+CD4+ and CD3+CD8+ lymphocytes from whole blood in a single tube. This system, exclusively available on COULTER EPICS XL/XL-MCL 4-color flow cytometers, consists of several reagents, listed below, and the tetraONE Software which features:

- all protocols required for cytometer set-up, standardization and verification for 4-color analysis.
- 3 dimensional lymphocyte auto-gating using Forward Scatter, Side Scatter and CD45.
- direct display of total CD3+, CD3+CD4+, CD3+CD8+, CD19+ and CD3-CD56+ percentages and absolute counts as well as CD4/CD8 ratio and percentage of total lymphocytes in real time.
- cellStat 3D Algorithm, a proprietary curve-fitting algorithm for the determination of cursor positions for automated population analysis.



	Size	Status	Part #
tetraCHROME CD45-FITC/CD4-PE/CD8-ECD/CD3-PC5	50 tests	IVD & CE	6607013
tetraCHROME CD45-FITC/CD56-PE/CD19-ECD/CD3-PC5	50 tests	IVD & CE	6607073
Flow-Check Fluorospheres	10 mL/vial	IVD & CE	6605359
Fluorospheres (10 µm)	-	3 vials	10 mL/vial
Flow-Set Fluorospheres	10 mL/vial	IVD & CE	6607007
Fluorospheres (3.6 µm)	-	3 vials	10 mL/vial
CYTO-COMP Cell Kit	50 tests	IVD & CE	6607023
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
CYTO-COMP Reagent Kit	50 tests	IVD & CE	6607021
COMP 1 (FITC/PE)	-	1 vial	50 tests
COMP 2 (PE/ECD)	-	1 vial	50 tests
COMP 3 (PE/PC5)	-	1 vial	50 tests
COMP 4 (ECD/PC5)	-	1 vial	50 tests
Flow-Count Fluorospheres		IVD & CE	7547053
Fluorospheres (10 µm)	-	1 vial	20 mL/vial
CYTO-TROL Control Cells		IVD & CE	6604248
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
IMMUNO-TROL Cells		IVD & CE	6607077
Quality Control Product	-	2 x 3 mL	60 tests
IMMUNO-TROL Low Cells		IVD & CE	6607098
Quality Control Product	-	2 x 3 mL	60 tests
tetraONE SYSTEM Software	-	IVD & CE	Please call

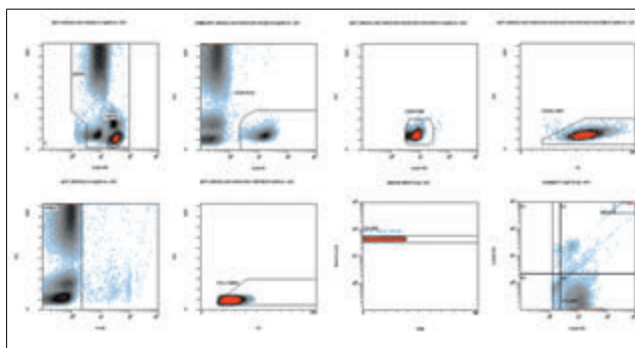
SYSTEMS AND KITS

Stem-Kit Reagents

	Size	Status	Part #
Stem-Kit Reagents	50 tests	IVD & CE	IM3630
CD45-FITC/CD34-PE			50 tests
CD45-FITC/IsoClonic Control-PE			50 tests
7-AAD Viability Dye	-		1 vial
10X NH ₄ Cl Lysing Solution	-		2 vials
Stem-Count Fluorospheres	-		1 vial

stemCXP SYSTEM

The stemCXP SYSTEM provides the first fully automated Windows*-based device for the simultaneous identification and enumeration of CD45⁺ and CD45⁺/CD34⁺ hematopoietic progenitor cell (HPC) populations from fresh peripheral or mobilized peripheral whole blood, fresh bone marrow, fresh and thawed apheresis products and cord blood. The stemCXP SYSTEM follows the ISCT (International Society for Cellular Therapy, formerly ISHAGE) guidelines. The stemCXP Software provides all protocols required for automated standardization of light scatter and fluorescence intensities, and automated adjustment of color compensation settings.



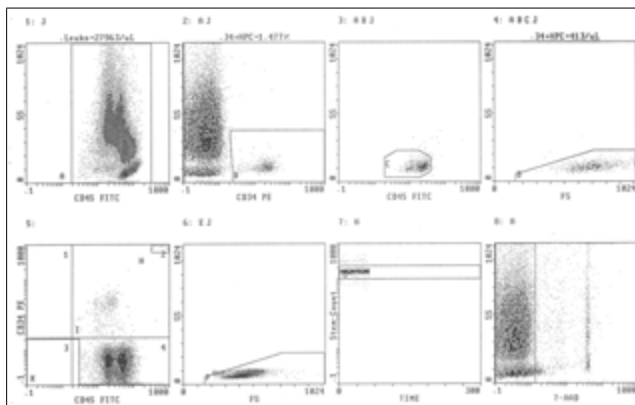
	Size	Status	Part #
Flow-Check Fluorospheres	10 mL/vial	IVD & CE	6605359
Fluorospheres (10 µm)	-	3 vials	10 mL/vial
Flow-Set Fluorospheres	10 mL/vial	IVD & CE	6607007
Fluorospheres (3.6 µm)	-	3 vials	10 mL/vial
CYTO-COMP Cell Kit	50 tests	IVD & CE	6607023
Cells (≥ 3.5 x 10 ⁶ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
QuickCOMP 2 Kit	50 tests	IVD & CE	177018
CD45-FITC	-	1 vial	50 tests
CD45-PE	-	1 vial	50 tests
Stem-Kit Reagents	50 tests	IVD & CE	IM3630
CD45-FITC/CD34-PE			50 tests
CD45-FITC/IsoClonic Control-PE			50 tests
7-AAD Viability Dye	-		1 vial
10X NH ₄ Cl Lysing Solution	-		2 vials
Stem-Count Fluorospheres	-		1 vial
Stem-Trol Control Cells		IVD & CE	IM3632
HPC Control Cells 0.2 mL/vial	-	1 vial	10 tests
stemCXP SYSTEM Software	-	IVD & CE	Please call

SYSTEMS AND KITS

stemONE SYSTEM

The stemONE SYSTEM provides a fully automated device for the simultaneous identification and enumeration of CD45+ and CD45+/CD34+ hematopoietic progenitor cell (HPC) populations from fresh peripheral or mobilized peripheral whole blood, fresh bone marrow, fresh and thawed apheresis products and cord blood. The stemONE SYSTEM follows the ISCT (International Society for Cellular Therapy, formerly ISHAGE) guidelines. This SYSTEM is exclusively available on the COULTER EPICS XL/XL-MCL Flow Cytometer with System II software.

The stemONE Software provides all protocols required for automated standardization of light scatter and fluorescence intensities, and automated adjustment of color compensation settings.



	Size	Status	Part #
Flow-Check Fluorospheres	10 mL/vial	IVD & CE	6605359
Fluorospheres (10 µm)	-	3 vials	10 mL/vial
Flow-Set Fluorospheres	10 mL/vial	IVD & CE	6607007
Fluorospheres (3.6 µm)	-	3 vials	10 mL/vial
CYTO-COMP Cell Kit	50 tests	IVD & CE	6607023
Cells ($\geq 3.5 \times 10^6$ cells/vial)	-	5 vials	50 tests
Reconstitution buffer	-	5 vials	1 mL/vial
Stem-Comp Reagent	50 tests	IVD & CE	IM3631
Stem-Comp Reagent	-	1 vial	50 tests
Stem-Trol Control Cells	10 tests	IVD & CE	IM3632
HPC Control Cells 0.2 mL/vial	-	1 vial	10 tests
Stem-Kit Reagents	50 tests	IVD & CE	IM3630
CD45-FITC/CD34-PE			50 tests
CD45-FITC/IsoClonic Control-PE			50 tests
7-AAD Viability Dye	-		1 vial
10X NH ₄ Cl Lysing Solution	-		2 vials
Stem-Count Fluorospheres	-		1 vial
stemONE SYSTEM Software	-	IVD & CE	Please call

SYSTEMS AND KITS

reticONE SYSTEM

The reticONE SYSTEM offers a fully-automated device for enumeration of reticulocytes from whole blood in a single tube. This system, exclusively available on COULTER EPICS XL/XL-MCL 3- and 4-color flow cytometers, consists of:

- reticONE Reagent Kit comprised of Retic-CAL Biological Calibrator and Retic-STAT Dye.

The Retic-CAL is used for instrument standardization.

The Retic-STAT Dye is a metachromatic dye that labels reticulocytes and permits interfering substances, such as white blood cells and platelets to be excluded from the reticulocyte calculation.

- the reticONE SYSTEM Software, with all protocols required for cytometer setup and standardization. This software includes two additional research protocols for allowing measurement of Cell Maturity Index (CMI) and Reticulocyte Distribution Index (RDI).

The 3-color COULTER EPICS XL/XL-MCL requires a 675 BP filter.

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
Filter, 675 BP	1 unit	nMD	6915056
For 3-color EPICS XL/XL-MCL			
reticONE Reagent Kit	100 tests	IVD	7547059
Retic-CAL Biological calibrator	-		100 tests
Retic-STAT Dye	-		100 tests
reticONE SYSTEM Software	1 unit	IVD & CE	6915048

COULTER Manual CD4 Count Kit

The COULTER Manual CD4 Count Kit is a portable, low-cost CD4 count method for determining the immune status of patients without the use of a flow cytometer. It involves latex beads coated with specific monoclonal antibodies. The antibody coated latex beads form rosettes around the cells of interest. The COULTER Manual CD4 Count Kit provides 2 µm diameter beads coated with monoclonal antibody to CD4 antigen (COULTER CD4 Cyto-Spheres Reagent), 0.2 µm diameter beads coated with monoclonal antibody to CD14 antigen (COULTER MY4 Cyto-Spheres Monocyte Blocking Reagent) used as a monocyte blocking reagent and a vial of COULTER Lysing Reagent. This simple, 10 minute method correlates with results from a flow cytometer to 30 cells/µL. For light microscopy.

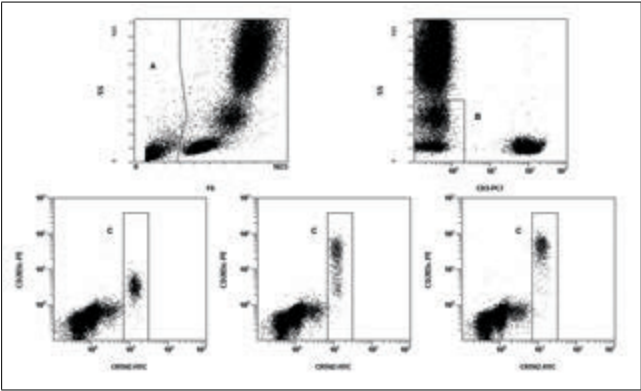
	<i>Size</i>	<i>Status</i>	<i>Part #</i>
CD4 Count Kit	50 tests	IVD & CE	6603876
CD4 Cyto-Spheres™ Reagent	-	Liquid	0.5 mL
MY4 Cyto-Spheres Reagent	-	Liquid	0.5 mL
Lysing reagent	-	Liquid	5 mL

Allergenicity Kit - Cellular Analysis of Allergy

Allergenicity Kit, Cellular Analysis of Allergy consists of an optimized three-color combination of fluorescent monoclonal antibodies, an activation solution, a positive control for IgE-mediated basophil activation, a stop solution, a lysing solution and a fixative solution.

The Allergenicity Kit is intended for the identification of resting and activated basophils based on an accurate basophils gating tool (utilizing CRTH2^{pos}CD203c^{pos}CD3^{neg}). The analysis is performed on whole blood specimens. The cell population of interest is stained with monoclonal antibodies in the presence of the allergen or controls. Erythrocytes are then lysed prior to flow cytometry analysis. Once T lymphocytes (CD3⁺ cells) are excluded, basophils are identified using CRTH2 and CD203c expression. Non-activated and resting basophils are CRTH2^{pos}CD203c^{dim}CD3^{neg}, whereas *in vitro* activated basophils are CRTH2^{pos}CD203c^{bright}CD3^{neg}.

The flow cytometer must be equipped to detect forward scatter, side scatter and three fluorescence channels allowing the analysis of FITC-, PE-, and PC7- conjugated antibodies.



	Size	Status	Part #
Allergenicity Kit	100 tests	CE	A17116
CRTH2-FITC / CD203c-PE / CD3-PC7		1 vial	2 mL
Positive Control	-	1 vial	0.2 mg
Activation Solution	-	2 vials	5 mL/vial
Stop Solution	-	1 vial	10 mL
Lysing Solution	-	3 vials	100 mL/vial
Fixative Solution	-	1 vial	10 mL
EPICS XL PC7 Filter Kit	-	nMD	6915493

Needed to run the Allergenicity Kit on the EPICS™ XL™ Series

SYSTEMS AND KITS

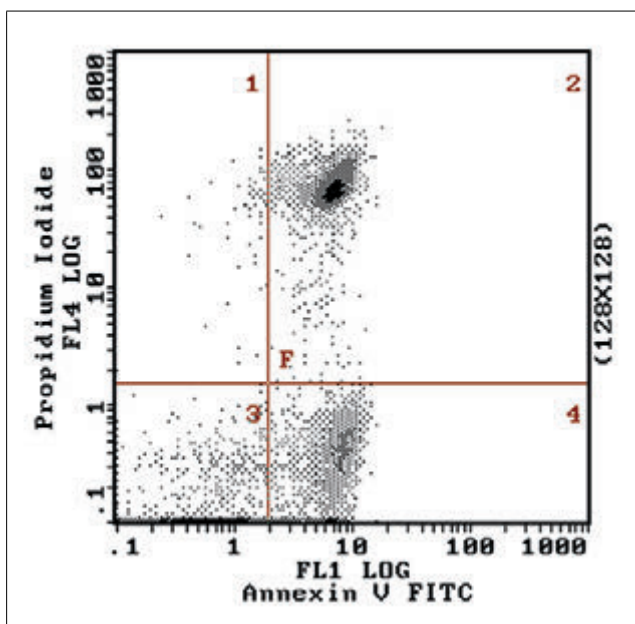
Annexin V Kits

In early apoptosis, cells lose membrane phospholipid asymmetry, whilst the integrity of the cell membrane is maintained. The Annexin-V kits contain a viability dye to evaluate membrane integrity as well as annexin-V to assess membrane asymmetry.

In fact, phosphatidylserine (PS), a negatively charged phospholipid located in the inner surface of the plasma membrane, appears very early in apoptosis at the external cell surface. Annexin V, a calcium and phospholipid binding protein, binds preferentially to PS. The Annexin V kits employ recombinant annexin V labeled with biotin, fluorescein or R-phycoerythrin in together with the viability dyes propidium iodide (PI) or 7-amino actinomycin D (7-AAD).

Apoptotic cells are easily identified utilizing a rapid and simple staining procedure. Fixation of the cells is not necessary.

When cells are double-stained with annexin V and a viability dye, three different cell populations may be observed (see figure below): (i) live cells that do not stain either with annexin V or with the vital dye, (ii) necrotic or late apoptotic cells that stain with both annexin V and the vital dye, and (iii) early apoptotic cells that stain with annexin V only.



Analysis may be performed on any flow cytometer equipped with a 488nm laser or Arc Lamp depending on the reagent kit chosen. Alternatively, the cells may be examined with a fluorescent microscope or cell imaging system equipped with the appropriate filters.

	Size	Status	Part #
Annexin V-FITC Kit (20 tests)	20 tests	RUO	IM2375
Annexin V-FITC	-	1 vial - ready-to-use	
Binding Buffer	-	1 vial - 10X concentrated	
Propidium Iodide	-	1 vial of powder	
Annexin V-FITC Kit (200 tests)	200 tests	RUO	IM3546
Annexin V-FITC	-	1 vial - ready-to-use	
Binding Buffer	-	6 vials - 10X concentrated	
Propidium Iodide	-	1 vial of powder	
Annexin V-FITC/7-AAD kit	150 tests	RUO	IM3614
Annexin V-FITC	-	1 vial	
7-AAD	-	1 vial	
Binding Buffer	-	5 vials - 10X concentrated	

SYSTEMS AND KITS

Residual Leukocyte Enumeration

The LeukoSure Enumeration Kit is comprised of a set of reagents used to prepare and enumerate white blood cells in leukoreduced red blood cell and platelet products by flow cytometry. The LeukoSure Enumeration Kit is configured to utilize the sensitivity of flow cytometry to enumerate residual leukocytes at the levels necessary to ensure the quality control of leukoreduced blood.

The enumeration method depends upon mixing a known volume (100 μ L) of LeukoSure Fluorospheres with an identical volume of sample to be tested. After analysis the absolute count for the specimen is calculated. This represents the absolute number of leukocytes in the specimen.

The specimen is lysed and permeabilized using the LeukoSure Lyse Reagent to eliminate RBCs and prepare the cells for subsequent addition of the LeukoSure Stain Reagent which contains propidium iodide and RNase (enzyme used to remove ribonucleic acid, or RNA). In the absence of RNA, propidium iodide binds only to double stranded deoxyribonucleic acid (DNA) so that nucleated cells in the sample emit fluorescence in proportion to their DNA content. The flow cytometer measures the fluorescence from each stained cell as it passes through the laser beam. Since mature platelets and red blood cells do not contain DNA, the stained cells represent the leukocyte component of the blood.

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
LeukoSure Enumeration Kit	200 tests	IVD & CE	175621
Leuko-Trol Platelet Control Kit	200 tests	IVD & CE	175651
Leuko-Trol RBC Control Kit	200 tests	IVD & CE	175658

IOtest Beta Mark TCR V β Repertoire Kit

The IOtest Beta Mark Kit is a multi parametric analysis tool designed for quantitative determination of the TCR V β repertoire of human T lymphocytes by flow cytometry. Taking advantage of the fact that V β specificities may be grouped into mutually exclusive combinations, the detection of 3 V β expressions in the same tube is possible with the use of an innovative staining strategy combining three monoclonal antibodies (mAb) with only two fluorophores. A first mAb is FITC-conjugated, a second one is PE-conjugated and a third one is a carefully balanced mixture of a PE- and a FITC-conjugated form. This kit simplifies the TCR V β repertoire analysis by reducing the number of tubes to analyze (8 instead of 24) and consequently the time required for obtaining the results. Moreover, this kit makes it possible to study the repertoire on T cell subsets, using additional T-cell markers, such as CD3, CD4, and CD8, conjugated to a third fluorophore. The kit is composed of 8 vials containing mixtures of conjugated TCR V β antibodies corresponding to 24 different specificities (about 70% coverage of normal human TCR V β repertoire). The test is intended for use on whole blood samples. The staining protocol includes a one-step procedure with directly conjugated antibody mixes (test volume of 20 μ L) and a wash step after staining. A third color T-cell marker (preferentially as PC5-conjugate; not included) is used to gate the specific population. The kit can be used in a multi parametric environment employing at least three-color flow cytometric analysis. The test is compatible with different methods of red blood cell lysis and can be run on Beckman Coulter as well as BD Biosciences cytometers. The IOtest Beta Mark kit includes a control for PMT setting and fluorescence compensation adjustments. Since the reagent in vial A is used as to prepare this control, the kit contains 50 tests of reagent A instead of 25.

				<i>Size</i>	<i>Status</i>	<i>Part #</i>
IOtest β Mark TCR V β Repertoire Kit				25 tests	RUO	IM3497
Vial A	V β 5.3	PE	3D11 (IgG1 Mouse)			
	V β 7.1	PE+FITC	ZOE (IgG2a Mouse)			
	V β 3	FITC	CH92 (IgM Mouse)			
Vial B	V β 9	PE	FIN9 (IgG2a Mouse)			
	V β 17	PE+FITC	E17.5F3.15.13 (IgG1 Mouse)			
	V β 16	FITC	TAMAYA1.2 (IgG1 Mouse)			
Vial C	V β 18	PE	BA62.6 (IgG1 Mouse)			
	V β 5.1	PE+FITC	IMMU 157 (IgG2a Mouse)			
	V β 20	FITC	ELL1.4 (IgG2a Mouse)			
Vial D	V β 13.1	PE	IMMU 222 (IgG2b Mouse)			
	V β 13.6	PE+FITC	JU74.3 (IgG1 Mouse)			
	V β 8	FITC	56C5.2 (IgG2a Mouse)			
Vial E	V β 5.2	PE	36213 (IgG1 Mouse)			
	V β 2	PE+FITC	MPB2D5 (IgG1 Mouse)			
	V β 12	FITC	VER2.32.1 (IgG2a Mouse)			
Vial F	V β 23	PE	AF23 (IgG1 Mouse)			
	V β 1	PE+FITC	BL37.2 (IgG1 Rat)			
	V β 21.3	FITC	IG125 (IgG2a Mouse)			
Vial G	V β 11	PE	C21 (IgG2a Mouse)			
	V β 22	PE+FITC	IMMU 546 (IgG1 Mouse)			
	V β 14	FITC	CAS1.1.3 (IgG1 Mouse)			
Vial H	V β 13.2	PE	H132 (IgG1 Mouse)			
	V β 4	PE+FITC	WJF24 (IgM Rat)			
	V β 7.2	FITC	ZIZOU4 (IgG2a Mouse)			

SYSTEMS AND KITS

Trillium Diagnostics FETALtrol

Fetal Red Blood Cell Controls

It is an established laboratory practice to use stabilized control cells to monitor the performance of diagnostic tests. FETALtrol is a tri-level, assayed, stabilized human blood control designed to document and monitor values obtained from test methods used to determine fetal red blood cells (RBCs) in maternal blood samples. The fetal RBCs in the product are Rho or D antigen positive and the adult RBCs are Rho or D antigen negative.

The laboratory determination of the level of fetal cells in maternal circulation remains an important support in the obstetrical management of women with suspected uterine trauma and in the proper dose administration of Rh immune globulin. FETALtrol provides a means of monitoring preparation techniques, stains, reagents, and methods of data analysis for quantitative and qualitative tests.



Features:

- FETALtrol is a stabilized blood product that handles like patient blood samples
- It eliminates the need to acquire cord blood and prepare home brew controls
- Assayed values at three levels serve as both a quality measure for the assay method, as well as a reference material for proper gating.

		Size	Status	Part #
FETALtrol Kit		100 tests	IVD & CE	B03279
Green cap and label	Level 1 (N) - Normal or Negative	-	2 vials	2 mL / vial
Blue cap and label	Level 2 (L) - Low Positive	-	2 vials	2 mL / vial
Red cap and label	Level 3 (H) - High Positive	-	2 vials	2 mL / vial

Not available in all geographies.

FETALtrol is a trademark or registered trademark of Trillium Diagnostics, LLC in the United States and in several other jurisdictions.

SYSTEMS AND KITS

Trillium Diagnostics QuikQuant

Flow cytometric methods have been developed over the last 10 years to distinguish fetal red blood cells (RBCs) from adult RBCs. These methods tend to be more precise and less subjective than manual methods.

The QuikQuant kit is a flow cytometric set of reagents for red blood cell characterization. The assay uses a reagent containing a monoclonal antibody to Hemoglobin F and Propidium Iodide as a specific marker of nucleated cells. The method is a rapid streamlined technique requiring about 30 minutes to complete with less than 15 minutes of technologist time needed.

- Features:
- Quick to perform
 - PI provides a definite tool for the characterization of white blood cells (WBCs)
 - Kit includes 10X concentrated permeabilization reagent
 - Works well with Trillium Dx FETALtrol as a system control

Rapid Assay for Fetal Red Blood Cells Detection



	Size	Status	Part #
QuikQuant Kit		CE	B03283
Antibody Reagent for Flow Cytometry	-	1 vial	1 mL
Intra-Cell Permeabilization Solution	-	1 vial 10X	40 mL
Buffer Solution	-	1 vial 10X	45 mL

Not available in all geographies

SYSTEMS AND KITS

Trillium Diagnostics Leuko64

Assay for Detection of Neutrophil Inflammation

Neutrophil CD64 expression is rapidly increased both in vitro and in vivo within hours by mediators of inflammation, such as interferon-gamma and G-CSF. The same change is observed in response to documented infection or tissue injury, thus indicating the measurement of neutrophil CD64 expression correlates with the presence of such conditions in humans.

The Leuko64 assay uses a mixture of three monoclonal antibodies with specificities to CD64 (clones 22 and 32.2) and CD163 (clone Mac2-158), a red blood cell (RBC) lysing solution, and a fluorescent bead suspension for instrument calibration and standardization of the leukocyte CD64 and CD163 expression in human blood.

- Features:
- Requires only 50 µL of blood and under one hour of hands-on time
 - Superior evaluation of neutrophil activation during inflammation
 - Standardized assay with internal calibrator and controls
 - User-friendly software allows for excellent reproducibility



	Size	Status	Part #
Leuko64 Kit (75 tests)	75 tests	CE	B03284
Mixture of murine monoclonal antibodies	-		
Lyse solution	-	10X concentrated	
Polystyrene beads labeled with a red dye and FITC		5.2 µm	

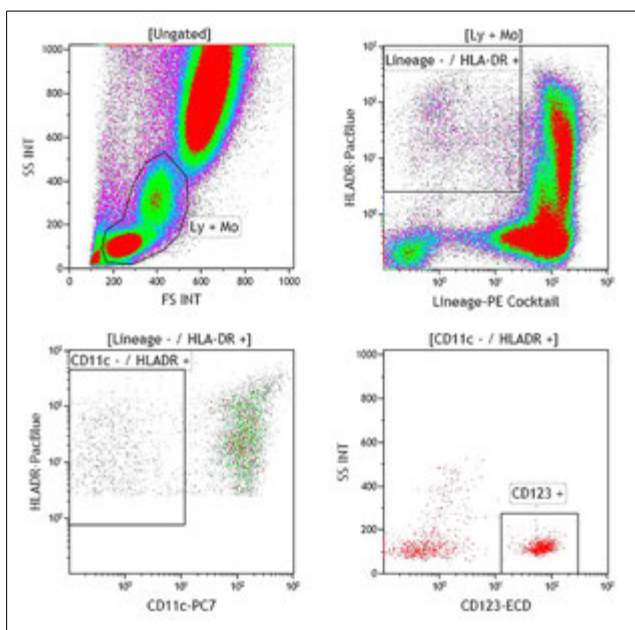
Not available in all geographies

SYSTEMS AND KITS

Lineage-PE Cocktail

The Lineage-PE Cocktail is comprised of PE-conjugated CD3, CD14, CD19, CD20 and CD56 antibodies. It enables the positive staining of five immune cell populations (T and B Lymphocytes, NK cells Monocytes/Macrophages) together, without distinction, in the PE channel using flow cytometry. When combined with fluorescent-labeled antibodies, other than PE, the gating on PE negative cells allows the phenotypical identification of Dendritic cells.

- The CD3 molecule is expressed only on cells of T lineage such as mature T cells and a subset of thymocytes. Approximately 65-75% of lymphocytes in peripheral blood are CD3+, although the percentage in children is lower and is age-related.
- The CD14 molecule is found on cells of myelomonocytic lineage. It is strongly expressed on monocytes, macrophages, and weakly on neutrophils. CD14 is not expressed on B lymphocytes, T lymphocytes, NK cells, red blood cells and platelets.
- The CD19 molecule is expressed on all B cells, including early progenitor B cells. Expression of CD19 persists during all stages of maturation and is lost only upon terminal differentiation to plasma cells. The CD19 molecule is not expressed on T lymphocytes, NK cells, Monocytes and Granulocytes.



- The CD20 molecule is expressed on B lineage cells. Its CD20 expression occurs early in pre-B lymphocyte development, persists throughout B lymphocyte ontogeny and is lost upon ultimate plasma cells differentiation. The CD20 molecule is present on all B lymphocytes whatever the hematopoietic tissue where they are found (peripheral blood, lymph nodes, spleen, tonsil, or bone marrow). CD20 is also expressed, but at low density, on a subset of peripheral blood T lymphocytes.
- The CD56 molecule, known as NCAM (Neural Cell Adhesion Molecule) antigen, is expressed on a subpopulation of peripheral blood large granular lymphocytes and on all cells with natural killer (NK) activity. It is also expressed by a minor subpopulation of CD3+ T cells that mediates reduced cytotoxic activity. It is not found on monocytes, granulocytes, erythrocytes or B lymphocytes.

			Size	Status	Part #
Lineage-PE Cocktail			100 tests	RUO	B29559
CD3	PE	UCHT1 (IgG1 Mouse)			
CD14	PE	RMO52 (IgG2a Mouse)			
CD19	PE	J3-119 (IgG1 Mouse)			
CD20	PE	B9E9 (IgG2a Mouse)			
CD56	PE	N901 (IgG1 Mouse)			

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

Beckman Coulter provides a complete comprehensive workflow solution for all your flow cytometry needs.

Product	Principle	Sample	Fixation in lysis step	Wash / No-wash	Fixation after lysis	Applications
Lysis without permeabilization						
Versalys	Ezyme-based erythrocytes lysis	Venous blood, bone marrow	Optional (IOtest3 Fixative Solution)	Can be used both washed and no-wash	Yes	Extracellular staining, Low stringency, Gentle to cells
IOtest 3 Lysing Solution	Ammonium Chloride based erythrocyte lysis	Venous blood, bone Marrow	No	Wash after lysis	Optional (IOtest3 Fixative)	Classical Reference Method for extracellular staining
OptiLys C	Formaldehyde-glycerol-based erythrocytes lysis.	Venous blood, bone marrow	Yes	Designed for no-wash	Yes	Extracellular staining on Beckman Coulter instruments
OptiLys B	Fixation and protection of cells and hypotonic shock to lyse	Venous blood	Yes	Designed for no-wash	Yes	Extracellular staining on Beckton-Dickinson instruments (low angle forward scatter)
Whole Blood Lysing Reagents	Amphipathic glycoside based lysis	Venous blood	No	Wash	Yes	Extracellular staining. Optimized for use with COULTER CLONE and CYTO-STAT COULTER CLONE antibodies
IMMUNOPREP	Formic acid-based lysis targeted for immunofluorescence measurements on flow cytometers	Venous blood	Yes	No-wash	Yes	Extracellular staining. Automatisation only Used on Q-PREP, FP1000, Multi-Q-prep and TQ-prep
Lysis with permeabilization						
IntraPrep Permeabilization Reagent	Formaldehyde/saponin-based Permeabilization	Venous blood, bone marrow	Yes	Wash	Yes	Classical Reference Method for intracellular staining
PerFix-nc	Low Formaldehyde/Low detergent-based permeabilisation.	Venous blood, peripheral blood mononuclear cells, mouse blood, bone marrow	Yes	Optional	Yes	Allows simultaneous staining of both extracellular and intracellular markers No wash procedure providing high resolution.
PerFix EXPOSE	Detection of phospho epitopes by fixation, erythrocyte lysis, and permeabilization.	Venous blood, bone marrow, peripheral blood mononuclear cells	Yes	Wash	Yes	High Stringency reagent. Phospho epitope detection. Allows the simultaneous staining of both extracellular markers, intracellular markers and phospho epitopes.
Fixation						
ThromboFix Platelet Stabilizer	two part liquid preparation containing buffered reagents that when combined in equal volumes is used for the stabilization of platelets.	Venous blood	Yes	Not Applicable	Yes	Preserves platelets in their current state at the time of preparation up to 7 days.
IOtest 3 Fixative Solution	Formaldehyde-based fixative, provided as 10X concentrate.	Venous blood, bone marrow	Yes	Not Applicable	Yes	Optimized to work in combination with IOtest 3 Lysing Solution, VersaLys Lysing Solution and other systems.

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

IMMUNOPREP Reagent System

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
For Q-PREP Workstation	100 tests	IVD & CE	7546946
For TQ-Prep Workstation	300 tests	IVD & CE	7546999

The IMMUNOPREP Reagent System is a rapid, no-wash, standardized, whole blood preparation procedure maximizing sample to sample, and laboratory to laboratory reproducibility. The IMMUNOPREP reagent lysing action reduces cell stress and minimizes cell shrinkage while maintaining cellular integrity and morphology. Separation of leukocyte cell populations of interest from red blood cell ghosts and debris is maximized. Scatter characteristics are optimized for superior cell type resolution. The IMMUNOPREP Reagent Kit is comprised of 3 ready-to-use reagents:

- Reagent A lyses the red blood cells.
- Reagent B buffers the solution and stops the lysing process.
- Reagent C fixes the cells.

IntraPrep Permeabilization Reagent

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
Fixative + Permeabilizer (5 mL + 5 mL)	50 tests	IVD & CE	A07802
Fixative + Permeabilizer (15 mL + 15 mL)	150 tests	IVD & CE	A07803
Fixative + Permeabilizer (5 mL + 5 mL)	50 tests	RUO	IM2388
Fixative + Permeabilizer (15 mL + 15 mL)	150 tests	RUO	IM2389

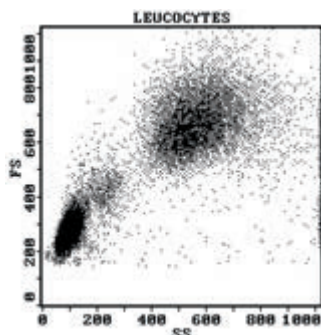
IntraPrep Permeabilization Reagent is a set of two ready-to-use reagents designed for the immunological detection of intracellular leucocyte antigens by flow cytometry. It uses a formaldehyde / saponin-based permeabilization procedure. IntraPrep Permeabilization Reagent can be used for detection of most cytoplasmic and nuclear antigens in whole blood samples. It creates apertures in the membrane without affecting the gross morphology of the cell. The resolution of each cell type on a dual light scatter histogram is well preserved during processing with this reagent system. The standard procedure consists of first, fixing cells with Reagent 1, and second, permeabilizing the white cells and lysing red cells using Reagent 2. The reagent formulation is optimized to minimize non-specific intracellular staining. The IntraPrep Permeabilization Reagent can be used for simultaneous detection of cell surface and cytoplasmic antigens by flow cytometry.

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

IOTest 3 Lysing Solution

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
Lysing Solution	100 tests	IVD & CE	A07799
Lysing Solution	100 tests	RUO	IM3514

IOTest3 Lysing Solution is an ammonium chloride-based erythrocyte lysing solution designed for flow cytometry. This reagent is provided as a 10X-concentrated mixture of ammonium chloride, potassium bicarbonate and ethylenediamine tetraacetic acid (EDTA). IOTest3 Lysing Solution allows whole blood or bone marrow specimen preparation by erythrolysis during immunophenotyping procedures. A wash post lysis is required to yield optimal results.



This dual-parameter light scatter histogram illustrates the expected spatial separation of leucocyte subsets after red cell lysis of normal peripheral blood with IOTest3 Lysing Solution and fixation with IOTest3 Fixative Solution.

IOTest 3 Fixative Solution

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
Fixative Solution	100 - 200 tests	IVD & CE	A07800
Fixative Solution	100 - 200 tests	RUO	IM3515

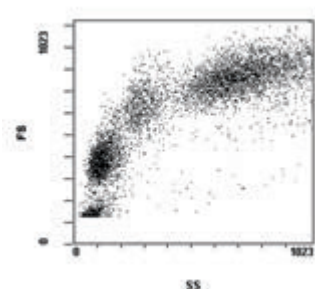
The IOTest3 Fixative Solution allows whole blood or bone marrow specimen preparation by fixing the cell suspension after erythrolysis during immunophenotyping procedures. At least one wash is required between the lysis and the fixation steps. The IOTest3 Fixative Solution is optimized to work in combination with the IOTest3 Lysing Solution. IOTest Fixative Solution is a formaldehyde-based fixative solution designed for flow cytometry. This reagent is provided as a concentrated solution in PBS.

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

OptiLyse No-Wash Lysing Solutions

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
OptiLyse C	200 tests	IVD & CE	A11895
OptiLyse C	200 tests	RUO	A11894
OptiLyse B	250 tests	RUO	IM1400

Both OptiLyse C and B are erythrolytic reagents intended for lysing human red blood cells following direct immunofluorescence staining of whole blood for flow cytometry. OptiLyse C is a ready-to-use lysing solution optimized for use on Beckman Coulter instruments. OptiLyse B is a ready-to-use lysing solution optimized for use on BD Biosciences* instruments.



This dual-parameter light scatter histogram illustrates the expected spatial separation of leucocyte subsets after red blood cell lysis of normal peripheral blood with OptiLyse C.

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

PerFix EXPOSE

Fast and Easy Procedure for Cell Signaling	Size	Status	Part #
Fixative Reagent : 1 vial Permeabilizing Reagent : 3 vials Staining Reagent : 2 vials Final 20X Solution : 1 vial	75 tests	RUO	B26976

The PerFix EXPOSE kit has been developed to enhance the signal-to-noise ratio of phosho-epitopes staining and to strongly reduce the workload necessary for the sample preparation.

Accurate detection of both intracellular and extracellular epitopes is obtained, while:

- There are only two washing steps through the procedure.
- There is no methanol treatment, and therefore no ice incubation required.
- A unique procedure can be applied to all phospho-epitopes.
- Several surface markers can be added together with the intracellular markers and incubated simultaneously.
- Total duration of the procedure and total workload are similar to current procedures for surface staining (about 1 hour).

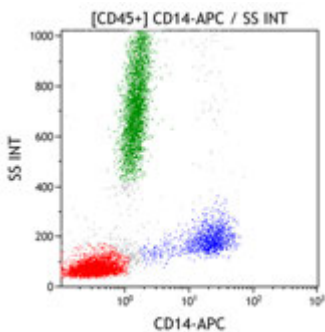


Illustration of leucocyte pattern and surface CD14 staining on a normal whole blood sample, implementing the STRAIGHT procedure (Surface and Phospho-epitopes markers incubated simultaneously).

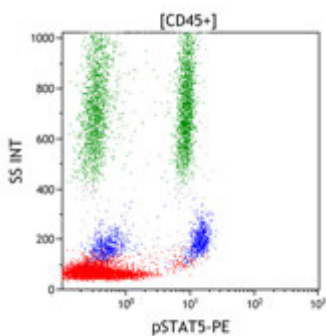


Illustration of leucocyte pattern and Phospho-STAT5 staining on the same normal sample (50/50 mix of GM-CSF activated and non-activated leucocytes), showing a pSTAT5-PE Relative Mean Fluorescence Intensity of more than 30 for both monocytes and granulocytes.

LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

PerFix-nc

For Intra- and Extra- Cellular Staining

	Size	Status	Part #
Fixative Buffer : 1 vial Permeabilizing Buffer : 1 vial Final 10X Solution : 1 vial	75 tests	IVD & CE	B31167
Fixative Buffer : 1 vial Permeabilizing Buffer : 1 vial Final 10X Solution : 1 vial	75 tests	RUO	B10825
Fixative Buffer : 2 vials Permeabilizing Buffer : 2 vials Final 10X Solution : 2 vials	150 tests	IVD & CE	B31168
Fixative Buffer : 2 vials Permeabilizing Buffer : 2 vials Final 10X Solution : 2 vials	150 tests	RUO	B10826

The PerFix-nc Kit (no centrifuge assay Kit) has been developed to enhance the signal-to-noise ratio of intracellular staining and simplify the workload necessary for the sample preparation.

Accurate detection of both intracellular and extracellular epitopes are obtained, while:

- There are no washing steps through the whole STRAIGHT procedure (only a final wash step is described as optional).
- Several surface markers can be added together with the intracellular markers and incubated simultaneously during the permeabilization step.
- Total duration of the procedure and total workload are similar to current procedures for surface staining (e.g. VersaLyse + Fix No Wash), and much shorter than common permeabilization procedures.
- Potential automation of the PerFix-nc STRAIGHT procedure is rendered possible thanks to the removal of the washing steps.

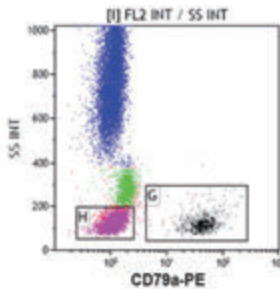
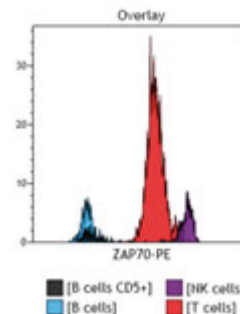


Illustration of leucocyte pattern and intracytoplasmic B-Cell staining on normal sample, implementing the PerFix-nc STRAIGHT protocol.



ZAP-70-PE staining on lymphocytes of another normal sample, implementing the PerFix-nc + wash protocol.

ThromboFix Platelet Stabilizer

	Size	Status	Part #
Platelet Stabilizer	25 tests	RUO	6607131
Platelet Stabilizer	100 tests	RUO	6607130

The ThromboFix Platelet stabilizer extends the window for platelet analysis by ensuring that the platelets cannot be induced to a new functional state, for example, activated. Platelet Stabilizer preserves platelets in their current state at the time of preparation. The ThromboFix Platelet stabilizer may be used in conjunction with platelet monoclonal antibody-dye conjugates for flow cytometric analysis.

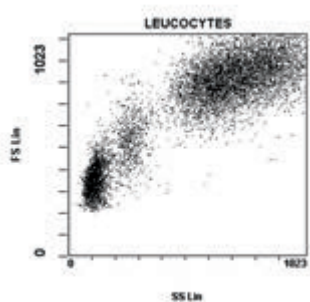
LYSING, PERMEABILIZING AND FIXATIVE SOLUTIONS

VersaLyse Lysing Solution

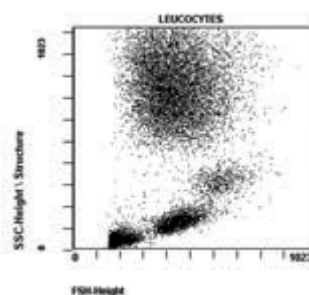
	Size	Status	Part #
Lysing Solution	100 tests	IVD & CE	A09777
Lysing Solution	100 tests	RUO	IM3648

VersaLyse Lysing Solution is a reagent used to lyse red blood cells from any biological fluid and, in particular, to lyse erythrocytes from whole blood. VersaLyse is a highly specific, very gentle lysing solution, suitable for applications such as immunophenotyping, cell sorting, activation or cell culture. It is designed for use in flow cytometry and facilitates obtaining highly discriminative scattergrams whatever the type of flow cytometer used. VersaLyse is a versatile reagent which may be used in lyse / wash, wash / lyse and lyse / no-wash procedures with undiluted or diluted samples.

The histograms are dual-parameter light scatter histograms (FS *versus* SS) of a normal K₃EDTA anticoagulated blood sample lysed with VersaLyse Lysing Solution (No-wash procedure).



Acquisition with a FC 500 flow cytometer using CXP Analysis software.



Acquisition with a BD Biosciences FACS Calibur® flow cytometer equipped with CellQuest® acquisition Software. Analysis utilizing EXPO32 analysis Software.

Whole Blood Lysing Reagents

	Size	Status	Part #
Lysing Kit	100 tests	IVD & CE	6602764
Lysing Kit	300 tests	IVD & CE	6603152

The 100-test lysing kit (part number 6602764) provides Immuno-Lyse, Fixative and Stabilizer for preparation of whole blood for analysis by fluorescence microscopy or flow cytometry. The 300-test lysing kit (part number 6603152) provides Immuno-Lyse and Fixative for preparation of whole blood for analysis by flow cytometry only.

ANCILLARY REAGENTS

PBS Buffer

This package contains 15 foil-wrapped packets of PBS Buffer reagent. Each package is brought up to a 500 mL volume with distilled water to yield a 0.01 M potassium phosphate, 0.15 M sodium chloride at a pH of 7.2 ± 0.2 .

<i>Format or Conjugate</i>	<i>Size</i>	<i>Status</i>	<i>Part #</i>
Powder	15 packets	LUO	6603369

NOTES

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VIABILITY DYES

Description	Utility
7-AAD Viability Dye	Ready-to-use reagent allowing discrimination of viable from non viable cells
DRAQ7 Far-Red Fluorescent Live-Cell Impermeant DNA Dye	Membrane impermeant fluorescent dye for the rapid and convenient staining of the dsDNA/nuclei of cells, tissues and organisms including dead, permeabilized or fixed mammalian cells
DAPI Viability Dye	Blue fluorescent nucleic acid stain that binds to double stranded DNA and appears to associate with AT clusters in the minor groove of the DNA molecule.

7-AAD Viability Dye

7-AAD Viability Dye is a ready-to-use reagent allowing discrimination of viable from non viable cells using flow cytometry. It is composed of 7-Amino-Actinomycin D (7-AAD) which intercalates between cytosine and guanine bases of the DNA. The maximum absorption of the 7-AAD / DNA complex is situated in the green spectral region, compatible with argon laser equipped-cytometer (excitation wavelength of 488 nm). The deep red fluorescence emission of 7-AAD (635 to 675 nm) makes the use of this probe easier in combination with fluorescein isothiocyanate (FITC) and phycoerythrin (PE) conjugated antibodies because, in contrast to propidium iodide (PI), the 7-AAD / DNA complex shows lower spectral overlap with FITC and PE.

	Size	Presentation
Viability Dye	150 tests	1 vial
	Status	Part #
CE		A07704
RUO		IM3422

DRAQ7 dye

DRAQ7 is a novel far-red emitting viability dye that can be used as a membrane impermeant fluorescent dye for the rapid and convenient staining of the dsDNA/nuclei of cells, tissues and organisms including dead, permeabilized or fixed mammalian cells with minimal RNA-associated fluorescence. It does not enter intact live cells, reducing the potential for false-positives, and making it an ideal reporter for real-time viability/toxicity studies by HCS imaging, flow or microplate-based cytometry.

	Size	Presentation
Viability Dye (0.3 mM)	200 tests	1 vial
	Status	Part #
RUO		B25595

DAPI

4',6-diamidino-2-phenylindole (DAPI) is a blue fluorescent nucleic acid stain that binds to double stranded DNA and appears to associate with AT clusters in the minor groove of the DNA molecule. DAPI undergoes approximately 20-fold enhancement of fluorescence when associated with DNA, having an excitation maximum of 358 nm and an emission maximum of 461 nm.

The spectral properties of DAPI make it very suitable for detecting viability on a flow cytometer equipped with an ultraviolet or a violet laser. DAPI is an impermeant DNA dye; it is largely excluded from live cells by competent plasma membranes, but can enter a compromised membrane where the dye can interact with DNA in the cell. Under recommended conditions, dead cells produce a bright fluorescent signal when excited with a violet laser and detected in the wavelength range of 425-475 nm. It can be readily used with dyes excited by other laser lines. Apoptotic, necrotic cells and / or damaged cells are source of interference in the analysis of viable cells by flow cytometry. Non-viable cells can be evaluated and discriminated following DAPI positive labeling when viable cells remain unstained (negative).

	Size	Presentation
Viability Dye	200 tests	1 vial
	Status	Part #
LUO		B30437

NOTES

[illegible]

ANTIBODIES TO HUMAN ANTIGENS

Dry Reagents

- DuraClone Multi-color Dry Reagent kits -----89-93
- DuraClone IM Dry Panels -----95 - 98

Multi-Color Liquid Reagents

- Table of Multi-Colors Liquid Reagents----- 99 - 108
- Multi-Color Liquid Reagents----- 109 - 118

Single-Color Liquid Reagents

- Table of Single-Colors Liquid Reagents ----- 119 - 124
- Single-color Liquid Reagents ----- 125 - 197

NOTES

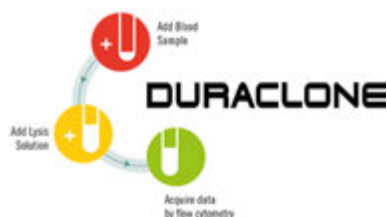
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DURACLONE MULTI-COLOR DRY REAGENT KITS

Beckman Coulter takes flow cytometry innovation to the next level with our DuraClone line of dry reagents. DuraClone Reagents Kits simplify your workflow and minimize your hands-on time.

DuraClone Dry Reagents come in a format that ensures stability for long periods of time without the need for refrigerated shipping or storage. Beckman Coulter new DuraClone line of dry reagents enables you to simplify and expedite sample preparation and handling while delivering the same performance as liquid reagents.

The DuraLyse solution is provided with DuraClone products (except with DuraClone T-Count). It is a lysing solution which results in simultaneous lysis of red blood cells under gentle hypotonic conditions and fixation of the leukocytes resulting in a leukocyte suspension substantially free of red blood cells and suitable for flow cytometric analysis.



ACCURATE AND REPRODUCIBLE

- Clones have been studied and clustered during an International Workshop on Human Leucocyte Differentiation Antigens (HLDA)
- No titration of antibodies
- No risk of aggregation in dried form

STABLE AND CONVENIENT

- Stable at room temperature
- Pre-dispensed reagents in unitized form - reduces pipetting errors
- Dried down reagents - No refrigeration

	Size	Status	Part #
DuraClone S34 Reagent Kit	50 tests	CE	B36863

The DuraClone S34 Reagent Kit uses the principle of immunofluorescence to enumerate hematopoietic stem cells in cell preparations. It is available in a unitized, dried-down format and is ideal for enumerating viable CD34⁺ cells in cord blood samples on a flow cytometry platform. This reagent is intended for use on open flow cytometers.

The DuraClone S34 Reagent Kit allows for flow cytometry based rapid and accurate assessment of live hematopoietic progenitor cell in accordance with the International Society of Hematotherapy and Graft Engineering (ISHAGE) guidelines. The success of hematopoietic transplantations and hematopoietic progenitor cell storage is relative to the absolute live CD34⁺ hematopoietic progenitor cells (HPC's).

The DuraClone S34 Reagent Kit facilitates a robust, single platform method of enumerating viable human CD34⁺ cells. The CD34 antigen is a 110 kDa single chain type1 trans-membrane glycoprotein, associated with human hematopoietic progenitor cell. The reagent contains workshop approved anti-mouse, anti-human monoclonal antibodies specific to the CD45 antigen, CD34 specific class III mouse anti-human monoclonal antibody, and 7-Amino Actinomycin-D (7-AAD) dye.

Viability dye 7-AAD is a DNA intercalating agent that stains only cells in the late phases of cell death when the integrity of both the cell and nuclear membranes is lost. It is important to exclude CD34 dead cells to assist in counting true live CD34⁺ cells. Investigators have demonstrated that graft containing 4-5 X 10⁶ CD34⁺ cells /kg recipient ideal body weight (IBW) will result in rapid, durable, tri-lineage engraftment.

Components	Size	Specificity	Fluorochrome	Clone (Isotype)
CD45-Atto*488/CD34-PE/7-AAD	50 tubes	CD34	PE	581 (IgG1 Mouse)
		CD45	Atto*488	H130 (IgG1 Mouse)
		-	7-AAD	-
DuraLyse Solution	1 x 25 mL			

DURACLONE MULTI-COLOR DRY REAGENT KITS

	Size	Status	Part #
DuraClone Tri T-STAT CD3/CD4/CD8 Reagent Kit	50 tests	CE	B39492

The DuraClone Tri T-STAT CD3/CD4/CD8 Reagent Kit is a three color immunofluorescence stain for the identification and enumeration of helper/inducer (CD4⁺) cytotoxic/suppressor (CD8⁺) and total T-lymphocytes (CD3⁺) combined with a precise number of fluorescent counting beads for absolute CD3⁺, CD4⁺, CD8⁺, T-Cells counts. This reagent is intended for flow cytometry based analysis in lysed human whole blood samples.

The reagent contains fluorescently labeled antibodies that bind to CD3, CD4 and CD8 antigens found on the surface of circulating leukocytes. The CD3 antigen is a complex of at least six proteins, known collectively as the T-cell receptor (TCR) complex. The antibody used in this reagent binds to the 20 kDa ϵ chain of this complex.

The CD4 antigen is a 59 kDa protein which interacts with class II molecules of the major histocompatibility complex and is the primary receptor for the Human Immunodeficiency Virus (HIV). The CD8 antigen is a complex consisting of two disulfide linked subunits. The antibody used in this reagent binds to the 32 kDa α subunit of the complex. CD8 interacts with class I major histocompatibility complex molecules.

Components	Size	Specificity	Fluorochrome	Clone (Isotype)
CD4-Atto*488/CD8-PE/CD3-PE-Dy649	50 tubes	CD4	Atto*488	RPA-T4 (IgG1 Mouse)
		CD8	PE	LT8 (IgG Mouse)
		CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
DuraLyse Solution	1 x 25 mL			

	Size	Status	Part #
DuraClone 34845 Reagent Kit	50 tests	CE	B36855

The DuraClone 34845 Reagent Kit is a four color immunofluorescence stain for the identification and enumeration of helper/inducer (CD4⁺) cytotoxic/suppressor (CD8⁺) and total T-lymphocytes (CD3⁺) combined with a precise number of fluorescent counting beads for absolute CD3⁺, CD4⁺, CD8⁺, T-Cells and absolute lymphocyte counts. This reagent is intended for flow cytometry based analysis in lysed human whole blood samples.

The reagent contains fluorescently labeled antibodies that bind to CD45, CD3, CD4 and CD8 antigens found on the surface of circulating leukocytes. The CD3 antigen is a complex of at least six proteins, known collectively as the T-cell receptor (TCR) complex. The antibody used in this reagent binds to the 20 kDa ϵ chain of this complex. The CD4 antigen is a 59 kDa protein which interacts with class II molecules of the major histocompatibility complex and is the primary receptor for the Human Immunodeficiency Virus (HIV). The CD8 antigen is a complex consisting of two disulfide linked subunits. The antibody used in this reagent binds to the 32 kDa α subunit of the complex. CD8 interacts with class I major histocompatibility complex molecules. The CD45 antigen is a complex 180-220 kDa transmembrane glycoprotein which is expressed in high levels on leukocyte cell surfaces and its presence distinguishes leukocytes from non-haematopoietic cells.

Components	Size	Specificity	Fluorochrome	Clone (Isotype)
CD3-Atto*488/CD8-PE/CD4-APC/CD45-PerCP	50 tubes	CD3	Atto*488	UCHT1 (IgG1 Mouse)
		CD8	PE	LT8 (IgG Mouse)
		CD4	APC	RPA-T4 (IgG1 Mouse)
		CD45	PerCP	HI30 (IgG1 Mouse)
DuraLyse Solution	1 x 25 mL			

DURACLONE MULTI-COLOR DRY REAGENT KITS

	Size	Status	Part #
DuraClone T-Count CD4/CD3 & CD8/CD3 Reagent Kit	20 tests	CE	B36859

DuraClone T-Count CD4/CD3 & CD8/CD3 Reagent Kit is a single unit, dual tube, two color immunofluorescence stain used for the identification and enumeration of helper/inducer (CD3⁺CD4⁺) T lymphocytes or T cells and cytotoxic/suppressor (CD3⁺CD8⁺) T cells. The reagent also contains a precise number of fluorescent beads that enable enumeration of absolute CD4⁺ and CD8⁺ T cell counts and average CD3⁺ T cell counts. This reagent is intended to be used based on a "no-wash" requirement in the protocol, for the analysis of "unlysed" human whole blood intended to be analyzed only on a BD FACSCount* flow cytometer.

DuraClone T-Count CD4/CD3 & CD8/CD3 Reagent Kit contains fluorescently labeled antibodies that bind to CD3, CD4, or CD8 antigens found on the surface of circulating leukocytes. CD3 recognizes the epsilon chain of the CD3 antigen/ T cell antigen receptor (TCR) complex. This complex is composed of at least six proteins that range from 20 to 30 kDa. The CD4 antigen is a 59 kDa protein. CD4 recognizes an antigen that interacts with class II molecules of the major histocompatibility complex (MHC). The CD8 antigen is a complex consisting of two disulfide linked subunits. The antibody used in this reagent binds to the 32 kDa subunit of the complex. CD8 antigen binds to class I major histocompatibility complex (MHC) molecules resulting in an increase adhesion between the CD8⁺ T lymphocytes and target cells. The Centers for Disease Control and Prevention (CDC) recommends using reagent combinations containing CD3 antibodies for determining T lymphocyte subsets in HIV-infected subjects.

Components	Size	Specificity	Fluorochrome	Clone (Isotype)
CD3-PE-Dy649/CD4-PE	20 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		CD4	PE	RPA-T4 (IgG1 Mouse)
CD3-PE-Dy649/CD8-PE	20 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		CD8	PE	LT8 (IgG Mouse)
DuraFix Solution (10X concentrate)	1 x 5 mL			
Diluent Solution	1 x 25 mL			

	Size	Status	Part #
DuraClone T-Count CD4/CD3 Reagent Kit	50 tests	CE	B36858

The DuraClone T- Count CD4/CD3 reagent is a single unit, single tube, two color immunofluorescence stain, used for the identification and enumeration of helper/inducer (CD3⁺CD4⁺) T lymphocytes. The reagent also contains a precise number of fluorescent counting beads for absolute CD4⁺ T cell counts and CD3⁺ counts. This reagent is intended to be used based on a "no-wash" requirement in the protocol, for the analysis of unlysed human whole blood intended to be analyzed only on a BD FACSCount* flow cytometer.

The DuraClone T-Count CD4/CD3 Reagent Kit contains fluorescently labeled antibodies that bind to CD3, and CD4 antigens found on the surface of circulating leukocytes. CD3 recognizes the epsilon chain of the CD3 antigen/T- cell antigen receptor (TCR) complex. This complex is composed of at least six proteins that range molecular weight from 20 to 30 kDa. The CD4 antigen is a 59 kDa protein. CD4 recognizes an antigen that interacts with class II molecules of the major histocompatibility complex (MHC). The Centers for Disease Control and Prevention (CDC) recommends using this reagent combination containing CD3 antibodies for determining the T lymphocyte subset in HIV-infected subjects.

Components	Size	Specificity	Fluorochrome	Clone (Isotype)
CD3-PE-Dy649/CD4-PE	50 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		CD4	PE	RPA-T4 (IgG1 Mouse)
DuraFix Solution (10X concentrate)	1 x 5 mL			
Diluent Solution	1 x 25 mL			

DURACLONE MULTI-COLOR DRY REAGENT KITS

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone 3 4 G Reagent Kit	50 tests	IVD	B36860 for India only

The DuraClone 3 4 G Reagent Kit is a two color immunofluorescence staining reagent for the enumeration of the absolute counts of the total T-lymphocytes (CD3⁺) and helper/inducer (CD4⁺) T-Cells. This reagent is intended for flow cytometry based analysis in lysed human whole blood samples, and is recommended for use on the Guava* Personal Cell Analysis (PCA) System.

The DuraClone 3 4 G Reagent Kit contains fluorescently labeled antibodies that bind to CD3 and CD4 antigens found on the surface of circulating leukocytes in peripheral blood samples. The CD3 antigen is a complex of six proteins known collectively as the T-cell receptor (TCR) complex. The antibody used in this reagent binds to the 20 kDa ϵ chain of this complex. The CD4 antigen is a 59 kDa protein. It interacts with class II molecules of the Major Histocompatibility Complex (MHC) and is the primary receptor for the Human Immunodeficiency Virus (HIV). Cells that are CD3⁺ and CD4⁺ are identified as helper/inducer lymphocytes. Decreased CD4⁺CD3⁺ cell counts have been associated with some forms of immunodeficiency.

<i>Components</i>	<i>Size</i>	<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
CD3-PE-Dy649/CD4-PE	50 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		CD4	PE	RPA-T4 (IgG1 Mouse)
DuraLyse Solution	1 x 25 mL			

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone 3 8 G Reagent Kit	50 tests	IVD	B36861 for India only

The DuraClone 3 8 G Reagent Kit is a two color immunofluorescence staining reagent for the enumeration of absolute counts of total T-lymphocytes (CD3⁺) and suppressor/cytotoxic (CD8⁺ T-Cells. This reagent is intended for flow cytometry based analysis in lysed human whole blood samples, and is recommended for use on the Guava® Personal Cell Analysis (PCA) System.

The DuraClone 3 8 G Reagent Kit contains fluorescently labeled antibodies that bind to CD3 and CD8 antigens found on the surface of circulating leukocytes in peripheral blood samples. The CD3 antigen is a complex of six proteins known collectively as the T-cell receptor (TCR) complex. The antibody used in this reagent binds to the 20 kDa ϵ chain of this complex. The CD8 antigen is a complex consisting of two disulfide linked subunits. The antibody used in this reagent binds to the 32 kDa α subunit of the complex. CD8 interacts with class I major histocompatibility complex molecules. Cells that are CD3⁺ and CD8⁺ are identified as suppressor/cytotoxic T lymphocytes.

Decreased CD8⁺CD3⁺ cell counts have been associated with some forms of immunodeficiency.

<i>Components</i>	<i>Size</i>	<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
CD3-PE-Dy649/CD8-PE	50 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		CD8	PE	LT8 (IgG Mouse)
DuraLyse Solution	1 x 25 mL			

DURACLONE MULTI-COLOR DRY REAGENT KITS

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone B27 Reagent Kit	50 tests	CE	B36862

The DuraClone B27 Reagent Kit comprises a two-color, immunofluorescence stain, suitable for detecting the HLA-B27 antigen expression in erythrocyte-lysed, human whole blood samples (for example, a lyse and no wash protocol), using a flow cytometer. This reagent is not intended to be used to determine the HLA-B27 tissue group.

The Human Leukocyte Antigen (HLA) B27 is a Class I surface antigen encoded by the B locus in the major histocompatibility complex (MHC) that presents microbial antigens to T-lymphocytes. The onset of seronegative spondyloarthropathies that include ankylosing spondylitis, Reiter's disease, psoriatic arthritis and inflammatory bowel disease are associated with the expression of HLA-B27 antigen on T-lymphocytes. Screening for HLA-B27 is thus of clinical relevance in conjunction with the symptomatic presentation of the disorder. Micro-lymphotoxicity tests are conventionally used in HLA-typing but are time-consuming and expensive. Flow cytometry has gradually evolved into a faster and reliable method for screening samples for HLA-B27 antigen.

T-lymphocytes selected through gating of the CD3⁺ specific population are analyzed for staining by HLA-B27 conjugates. It has been demonstrated that this pre- selection of T-lymphocytes increases the specificity of the test by eliminating the background attributed to other leukocyte populations. Another method of lowering the risk of false-positives is by the addition of an Anti-B7 antibody to the reagent cocktail. The Anti-B7 antibody competes with the Anti-B27 antibody for the B7 antigen and in this manner, suppressing the incidence of cross- reactivity of Anti-B27 antibodies to B7 antigens.

The DuraClone B27 Reagent Kit contains two clones of the Anti-HLA-B27 antibody and an Anti -B7 antibody. The presence of these antibodies improves the specificity of the reagent. The Anti-B7 antibody binds preferentially to the B7 antigen, thus reducing cross-reactivity.

The test result is a direct extrapolation of the fluorescent staining intensity of the HLA-B27 conjugates with respect to a cutoff value.

A protocol, specific to BD Biosciences* instruments, is detailed in the B27 Reagent Kit IFU (Instruction for Use).

<i>Components</i>	<i>Size</i>	<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
CD3-PE-Dy649/HLA-B27-PE/HLA-B7	50 tubes	CD3	PE-Dy649	UCHT1 (IgG1 Mouse)
		HLA-B27	PE	HLA-ABC-m3 (IgG2a Mouse)
		HLA-B27	PE	FD705 (IgG2b Mouse)
		HLA-B7	-	BB7.1 (IgG1 Mouse)
DuraLyse Solution	1 x 25 mL			

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

DURACLONE IM DRY PANELS

DuraClone IM Panels are premixed, dried reagent cocktails to standardize and streamline flow cytometry workflow for clinical research studies involving the identification of principal populations of the human immune system.

DuraClone IM panels are provided with a robust compensation solution which delivers the standardization and workflow efficiency required for clinical research studies.

Three dried reagent **single color compensation kits** are provided in each package of 25 assay tubes. DuraClone IM single color conjugate compensation tubes are color-coded with lot-matched dyes, specific for each panel.

- Simplified detection of immune sub-populations
- Standardized for use in clinical research studies
- Designed and optimized by The ONE Study



	Size	Status	Part #
DuraClone IM Phenotyping BASIC Tube	25 tests	RUO	B53309

Lymphocytes constitute a part of the human immune system that is referred to as “adaptive” due to their ability to acquire cognition and memory of foreign antigens. B cells (CD45+CD19+) represent the principal part of the humoral branch of adaptive immunity producing antibodies upon terminal differentiation. The cell-mediated adaptive immune response is mainly due to T cells (CD45+CD3+) that comprise a large number of functionally diverse entities with the highest level of discrimination - though not encompassing all T cells, being either CD4+ or CD8+. While CD4+ T cells play a key role in balancing humoral, cell-mediated as well as innate immune responses, e.g. by means of cytokine secretion; CD8+ T cells are mainly responsible for Major Histocompatibility Complex (MHC) - mediated recognition and killing of tumor and virusinfected cells. The CD45+CD3-CD56+ phenotype identifies Natural Killer (NK) cells that complement the specificity of T cell receptors and immunoglobulins by the recognition of the “missing self”, i.e. the absence of hostmatched MHC molecules presenting processed antigens on the membrane surface. Being a part of the innate human immune system, monocytes (CD45+CD19+) play a key role in bacterial defense. Expression of the Lipopolysaccharide (LPS, endotoxin) receptor CD14 is dense on the majority of monocytes bearing a classical phenotype.

The IM Phenotyping BASIC Tube is an 8-color, 8-monoclonal antibody reagent that allows the identification of common extracellular markers of different subpopulations of lymphocytes, present in whole blood specimens.

It contains 3 Compensation Kits, each kit containing eight tubes, each of a single color: CD4-FITC; CD4-PE; CD19-ECD; CD14-PC7; CD4-APC; CD8-A700; CD3-APC-A750; CD8-Krome Orange.

Specificity	Fluorochrome	Clone (Isotype)
CD16	FITC	3G8 (IgG1 Mouse)
CD56	PE	N901 (IgG1 Mouse)
CD19	ECD	J3-119 (IgG1 Mouse)
CD14	PC7	RM052 (IgG2a Mouse)
CD4	APC	13B8.2 (IgG1 Mouse)
CD8	Alexa Fluor* 700	B9.11 (IgG1 Mouse)
CD3	APC-Alexa Fluor* 750	UCHT1 (IgG1 Mouse)
CD45	Krome Orange	J33 (IgG1 Mouse)

DURACLONE IM DRY PANELS

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone IM B cell Tube	25 tests	RUO	B53318

The major function of B cells (CD45+CD19+) in the human immune system is to recognize and memorize immunogenic structures and to terminally differentiate into plasma cells that produce antibodies against these recognized or memorized antigens. Late maturation stages of B cells are confined to peripheral compartments and can be described based on a previously published classification. The passage from bone marrow into peripheral compartments is associated with surface expression of immunoglobulin of the isotype classes M and D (IgM, IgD). Among IgM+ B cells high expression of CD24 along with absence of CD27 identifies transitional B cells, the earliest stage of maturation in peripheral compartments. Acquisition of CD27 expression identifies transition from a naïve to a marginal zone phenotype, further acquisition of low CD38 expression reveals memory identity (non-isotype -class switched). Loss of IgM and IgD surface expression is indicative of immunoglobulin isotype class switching giving rise to CD27+CD38- class-switched memory cells or CD27+CD38++ plasmablasts.

The DuraClone IM B cells Tube is an 8-color, 8- monoclonal antibody reagent that allows the identification of B lymphocyte subpopulations present in whole blood samples.

It contains 3 compensation kits; each kit containing eight tubes, each containing a single color:

☒CD4-FITC; CD4-PE; CD19-ECD; CD27-PC7; CD4-APC; CD38-APC-A750; CD4-Pacific Blue; CD8-Krome Orange.

<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
IgD	FITC	IA6-2 (IgG2a Mouse)
CD21	PE	BL13 (IgG1 Mouse)
CD19	ECD	J3-119 (IgG1 Mouse)
CD27	PC7	1A4CD27 (IgG1 Mouse)
CD24	APC	ALB9 (IgG1 Mouse)
CD38	APC-Alexa Fluor* 750	LS198-4-3 (IgG1 Mouse)
IgM	Pacific Blue*	SA-DA4 (IgG1 Mouse)
CD45	Krome Orange	J33 (IgG1 Mouse)

DURACLONE IM DRY PANELS

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone IM T cell subsets Tube	25 tests	RUO	B53328

When studying the immune response, T cell-mediated immunity is the central component. After their maturation in the thymus, T cells circulate in blood and in the lymphatic system as naive T cells expressing lymph node homing antigens such as CD197/ CCR7. Upon exposure to foreign antigens through encounter with specialized, antigen-presenting cells in secondary lymphoid tissues, T cells become antigen-specific effector cells associated with loss of CD27 and CD28 expression. Along with the effector cells, long-living central memory (CD45RA-CCR7+) and effector memory T cells (CD45RACCR7-) are generated to achieve and preserve the ability of rapid antigen-specific immune response. Terminal effector stages of T cell differentiation are indicated by upregulation of CD57 (effector phenotype) and CD279/PD-1 (co-inhibitory molecule, exhausted phenotype) expression.

The IM T cell subsets Tube is a 10-color, 10-monoclonal antibody reagent that allows the identification of common extracellular markers of different cell subsets, present in whole blood specimens.

It contains 3 Compensation Kits, each kit containing ten tubes, each of a single color: CD4-FITC, CD4-PE, CD28-ECD, CD279-PC5.5, CD27-PC7, CD4-APC, CD8-A700, CD3-APC-A750, CD4-Pacific Blue, CD8-Krome Orange

<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
CD45RA	FITC	2H4LDH11LDB9 (IgG1 Mouse)
CD197	PE	G043H7 (IgG2a Mouse)
CD28	ECD	CD28.2 (IgG1 Mouse)
CD279	PC5.5	PD1.3 (IgG2b Mouse)
CD27	PC7	1A4CD27 (IgG1 Mouse)
CD4	APC	13B8.2 (IgG1 Mouse)
CD8	Alexa Fluor* 700	B9.11 (IgG1 Mouse)
CD3	APC-Alexa Fluor* 750	UCHT1 (IgG1 Mouse)
CD57	Pacific Blue*	NC1 (IgM Mouse)
CD45	Krome Orange	J33 (IgG1 Mouse)

DURACLONE IM DRY PANELS

	<i>Size</i>	<i>Status</i>	<i>Part #</i>
DuraClone IM Dendritic cell Tube	25 tests	RUO	B53351

In human blood, DC can be separated in two main subsets, namely the myeloid DCs (mDCs) and the plasmacytoid DCs (pDCs). Both subsets share the lack of expression of classical mature lymphocytes lineage markers, CD3, CD19, CD20 and CD56 as well as the monocytic CD14 and a high expression level of HLA-DR. mDCs and pDCs differ by their CD11c expression, with mDCs expressing high level of CD11c while pDCs do not express CD11c.

pDCs, which are distinguished by the expression of CD123, are less potent to present antigen but constitute the 1st barrier in anti-viral immunity. Upon virus exposure, pDCs produce large amount of Type I interferons.

mDCs are highly efficient in antigen presentation. In blood, 3 subsets of mDCs are identified: CD1c+ mDCs (MDC1), CD141 + mDCs (MDC2), and CD16+ mDCs. MDC1 have been described as key players in the induction of immunity towards extracellular pathogens. MDC2 are suggested to drive the CD8+ T cell-mediated immune response. Recently, it has been shown that MDC2 express CLEC9A, a C-type lectin domain family. As opposed to CD141, CLEC9A presents the advantage of being expressed in both human and mouse DCs. Thus, it can serve as a DC marker crossing species barriers and may help in the translation from the mouse DC system to human immunobiology. CD16+ mDCs have been described as inflammatory dendritic cells.

The DuraClone IM Dendritic cells Tube is an 8-color, 12-monoclonal antibody reagent that allows the identification of common extracellular markers of different DC Subsets, present in whole blood specimens.

It contains 3 Compensation Kits, each kit containing eight tubes, each of a single color:

CD4-FITC; CD4-PE; CD1c-PC5.5; CD11c-PC7; CD4-APC; CD123-APCA700; CD4-Pacific Blue; CD8-Krome Orange

<i>Specificity</i>	<i>Fluorochrome</i>	<i>Clone (Isotype)</i>
CD16	FITC	3G8 (IgG1 Mouse)
Lineage (CD3/CD14/CD19/CD20/CD56)	PE	-
CD1c	PC5.5	L161 (IgG1 Mouse)
CD11c	PC7	BU15 (IgG1 Mouse)
Clec9A	APC	8F9 (IgG2a Mouse)
CD123	APC-Alexa Fluor* 700	SSDCLY107D2 (IgG1 Mouse)
HLA-DR	Pacific Blue*	Immu-357 (IgG1 Mouse)
CD45	Krome Orange	J33 (IgG1 Mouse)

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number ASR	CE	IVD
CD2									
2-color									
	CD2	CD19	-	-	-	IM1289U			
	CD2	CD7	-	-	-		6604239		
	CD19	CD2	-	-	-			6603801	6603801
CD3									
4-color									
	CD45	CD4	CD8	CD3	-			6607013	6607013
	CD45	CD56	CD19	CD3	-			6607073	6607073
3-color									
	CD3	CD4	-	CD45	-	IM1651			
	CD3	CD8	-	CD45	-	IM1670			
	CD3	CD19	-	CD45	-	IM1671			
	CD4	CD8	-	CD3	-	IM1650			
	CD5	CD7	CD3	-	-			A07725	
	CD8	CD4	CD3	-	-			A07726	
	CD8	CD4	-	CD3	-			6607053	6607053
	CD8	CD4	-	-	CD3	6607103			
	CD16	CD56	CD3	-	-			A07728	
	CD25	CD4	CD3	-	-			A07727	
	CD45	CD4	-	CD3	-			6607015	6607015
	CD45	CD8	-	CD3	-			6607017	6607017
	CD45	CD56	-	CD3	-			6607071	6607071
	CD45	CD19	-	CD3	-			6607072	6607072
	MPO	CD79a	CD3	-	-			A07705	
	Neg.Ctrl.	Neg.Ctrl.	CD3	-	-			A07731	
2-color									
	CD3	CD56	-	-	-		IM2075U		
	CD3	CD4	-	-	-			A07733	
	CD3	CD8	-	-	-			A07734	
	CD3	CD(16+56)	-	-	-	IM2076		A07735	
	CD3	CD19	-	-	-			A07736	
	CD3	HLA-DR	-	-	-			A07737	
	CD3	CD4	-	-	-	IM1382			
	CD3	CD8	-	-	-	IM1383			
	CD3	CD19	-	-	-	IM1384			
	CD3	CD25	-	-	-	IM2667U			
	CD3	CD4	-	-	-			6604929	6604929
	CD3	CD8	-	-	-			6604930	6604930
	CD3	CD19	-	-	-			6605015	6605015
	CD3	CD56	-	-	-			6607068	6607068
	CD3	-	-	CD56	-	A07415			
	CD3	HLA-DR	-	-	-	IM1295U			
	HLA-DR	CD3	-	-	-	IM1300			

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number	ASR	CE	IVD
CD4										
4-color										
	CD45	CD4	CD8	CD3	-				6607013	6607013
3-color										
	CD3	CD4	-	CD45	-	IM1651				
	CD4	CD8	-	CD3	-	IM1650				
	CD8	CD4	CD3	-	-				A07726	
	CD8	CD4	-	CD3	-				6607053	6607053
	CD8	CD4	-	-	CD3	6607103				
	CD25	CD4	CD3	-	-				A07727	
	CD45	CD4	-	CD3	-				6607015	6607015
2-color										
	CD3	CD4	-	-	-				A07733	
	CD3	CD4	-	-	-	IM1382				
	CD3	CD4	-	-	-				6604929	6604929
	CD4	CD8	-	-	-		IM0747U			
	CD4	CD8	-	-	-	IM1385				
	CD4	CD29	-	-	-		6603799			
	CD4	CD45RA	-	-	-		6603800			
	CD4	CD8	-	-	-				6604614	6604614
	CD8	CD4	-	-	-		IM1379U			
	CD8	CD4	-	-	-				6603802	6603802
	CD45RA	CD4	-	-	-	IM2762				
CD5										
3-color										
	CD5	CD10	CD19	-	-				A07707	
	CD5	CD23	CD19	-	-				A07710	
	CD5	CD7	CD3	-	-				A07725	
2-color										
	CD19	CD5	-	-	-	IM1346U				
CD7										
3-color										
	CD5	CD7	CD3	-	-				A07725	
	HLA-DR	CD7	CD45	-	-				A07724	
2-color										
	CD2	CD7	-	-	-		6604239			

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number	ASR	CE	IVD
CD8										
4-color										
	CD45	CD4	CD8	CD3	-				6607013	6607013
3-color										
	CD3	CD8	-	CD45	-	IM1670				
	CD4	CD8	-	CD3	-	IM1650				
	CD8	CD4	CD3	-	-				A07726	
	CD8	CD4	-	CD3	-				6607053	6607053
	CD8	CD4	-	-	CD3	6607103				
	CD45	CD8	-	CD3	-				6607017	6607017
2-color										
	CD3	CD8	-	-	-				A07734	
	CD3	CD8	-	-	-	IM1383				
	CD3	CD8	-	-	-				6604930	6604930
	CD4	CD8	-	-	-		IM0747U			
	CD4	CD8	-	-	-	IM1385				
	CD4	CD8	-	-	-				6604614	6604614
	CD8	CD4	-	-	-		IM1379U			
	CD8	CD38	-	-	-	IM2695U				
	CD8	CD56	-	-	-		6603798			
	CD8	CD4	-	-	-				6603802	6603802
	CD38	CD8	-	-	-	IM2673U				
	CD57	CD8	-	-	-	IM1198				
	HLA-DR	CD8	-	-	-	IM1199U				
CD10										
3-color										
	CD5	CD10	CD19	-	-				A07707	
	CD19	CD10	CD45	-	-				A07713	
	CD20	CD10	CD19	-	-				A07708	
2-color										
	CD10	CD19	-	-	-		6604241			
CD11c										
3-color										
	CD25	CD11c	CD19	-	-				A07711	
	CD103	CD11c	CD19	-	-				A07712	
CD13										
3-color										
	CD14	CD13	CD45	-	-				A07722	
	HLA-DR	CD13	CD45	-	-				A07720	

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	Part Number			
						RUO	ASR	CE	IVD
CD14									
3-color									
	CD14	CD16	CD45	-	-			A07715	
	CD14	CD13	CD45	-	-			A07722	
2-color									
	CD45	CD14	-	-	-			A07738	
	CD45	CD14	-	-	-	IM1387			
	CD45	CD14	-	-	-			6603909	6603909
CD(14+16)									
3-color									
	CD(14+16)	CD85k	-	CD33	-			A23413	
	CD(14+16)	CD85k	-	CD123	-			A23416	
CD15									
3-color									
	CD15	CD33	CD45	-	-			A07721	
CD16									
3-color									
	CD14	CD16	CD45	-	-			A07715	
	CD16	CD56	CD3	-	-			A07728	
CD(16+56)									
2-color									
	CD3	CD(16+56)	-	-	-	IM2076		A07735	
CD19									
4-color									
	CD45	CD56	CD19	CD3	-			6607073	6607073
3-color									
	CD3	CD19	-	CD45	-	IM1671			
	CD5	CD10	CD19	-	-			A07707	
	CD5	CD23	CD19	-	-			A07710	
	CD19	CD10	CD45	-	-			A07713	
	CD20	CD10	CD19	-	-			A07708	
	CD25	CD11c	CD19	-	-			A07711	
	CD45	CD19	-	CD3	-			6607072	6607072
	CD103	CD11c	CD19	-	-			A07712	
	FMC7	CD23	CD19	-	-			A07709	
	Kappa	Lambda	CD19	-	-			A07706	
	Neg.Ctrl.	Neg.Ctrl.	CD19	-	-			A07730	
2-color									
	CD2	CD19	-	-	-	IM1289U			
	CD3	CD19	-	-	-			A07736	
	CD3	CD19	-	-	-	IM1384			
	CD3	CD19	-	-	-			6605015	6605015
	CD10	CD19	-	-	-		6604241		
	CD19	CD5	-	-	-	IM1346U			
	CD19	CD2	-	-	-			6603801	6603801

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number		
							ASR	CE	IVD
CD20									
3-color									
	CD20	CD10	CD19	-	-			A07708	
CD23									
3-color									
	CD5	CD23	CD19	-	-			A07710	
	FMC7	CD23	CD19	-	-			A07709	
CD25									
3-color									
	CD25	CD11c	CD19	-	-			A07711	
	CD25	CD4	CD3	-	-			A07727	
2-color									
	CD3	CD25	-	-	-	IM2667U			
CD29									
2-color									
	CD4	CD29	-	-	-		6603799		
CD33									
3-color									
	CD(14+16)	CD85k	-	CD33	-			A23413	
	CD15	CD33	CD45	-	-			A07721	
	CD34	CD33	CD45	-	-			A07717	
	CD71	CD33	CD45	-	-			A07716	
CD34									
3-color									
	CD34	CD33	CD45	-	-			A07717	
	CD34	CD117	CD45	-	-			A07718	
	HLA-DR	CD34	CD45	-	-			A07719	
CD36									
2-color									
	CD36	CD235a	-	-	-	IM2279U			
CD38									
3-color									
	CD38	CD56	CD45	-	-			A07714	
2-color									
	CD8	CD38	-	-	-	IM2695U			
	CD38	CD8	-	-	-	IM2673U			

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number	ASR	CE	IVD
CD41										
3-color										
	CD41	CD235a	CD45	-	-				A07723	
CD45										
4-color										
	CD45	CD4	CD8	CD3	-				6607013	6607013
	CD45	CD56	CD19	CD3	-				6607073	6607073
3-color										
	CD3	CD4	-	CD45	-	IM1651				
	CD3	CD8	-	CD45	-	IM1670				
	CD3	CD19	-	CD45	-	IM1671				
	CD14	CD16	CD45	-	-				A07715	
	CD14	CD13	CD45	-	-				A07722	
	CD15	CD33	CD45	-	-				A07721	
	CD19	CD10	CD45	-	-				A07713	
	CD34	CD33	CD45	-	-				A07717	
	CD34	CD117	CD45	-	-				A07718	
	CD38	CD56	CD45	-	-				A07714	
	CD41	CD235a	CD45	-	-				A07723	
	CD45	CD4	-	CD3	-				6607015	6607015
	CD45	CD8	-	CD3	-				6607017	6607017
	CD45	IgG1	-	IgG1	-				6607019	6607019
	CD45	CD56	-	CD3	-				6607071	6607071
	CD45	CD19	-	CD3	-				6607072	6607072
	CD71	CD33	CD45	-	-				A07716	
	HLA-DR	CD34	CD45	-	-				A07719	
	HLA-DR	CD13	CD45	-	-				A07720	
	HLA-DR	CD7	CD45	-	-				A07724	
	Neg.Ctrl.	Neg.Ctrl.	CD45	-	-				A07729	
IgG1	IgG1	-	CD45	-	IM1673					
2-color										
	CD45	CD14	-	-	-				A07738	
	CD45	CD14	-	-	-	IM1387				
	CD45	CD235a	-	-	-	IM2280U				
	CD45	CD14	-	-	-				6603909	6603909
CD45RA										
2-color										
	CD4	CD45RA	-	-	-		6603800			
	CD45RA	CD4	-	-	-	IM2762				

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number	ASR	CE	IVD
CD56										
4-color										
	CD45	CD56	CD19	CD3	-				6607073	6607073
3-color										
	CD16	CD56	CD3	-	-				A07728	
	CD38	CD56	CD45	-	-				A07714	
	CD45	CD56	-	CD3	-				6607071	6607071
2-color										
	CD3	CD56	-	-	-		IM2075U			
	CD3	CD56	-	-	-				6607068	6607068
	CD3	-	-	CD56	-	A07415				
	CD8	CD56	-	-	-		6603798			
CD57										
2-color										
	CD57	CD8	-	-	-	IM1198				
CD71										
3-color										
	CD71	CD33	CD45	-	-				A07716	
CD79a										
3-color										
	MPO	CD79a	CD3	-	-				A07705	
CD85k										
3-color										
	CD(14+16)	CD85k	-	CD33	-				A23413	
	CD(14+16)	CD85k	-	CD123	-				A23416	
CD103										
3-color										
	CD103	CD11c	CD19	-	-				A07712	
CD117										
3-color										
	CD34	CD117	CD45	-	-				A07718	
CD123										
3-color										
	CD(14+16)	CD85k	-	CD123	-				A23416	

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	RUO	Part Number		
							ASR	CE	IVD
CD235a									
3-color									
	CD41	CD235a	CD45	-	-			A07723	
2-color									
	CD36	CD235a	-	-	-	IM2279U			
	CD45	CD235a	-	-	-	IM2280U			
FMC7									
3-color									
	FMC7	CD23	CD19	-	-			A07709	
HLA-B7									
2-color									
	HLA-B27	HLA-B7	-	-	-	IM1502		A07739	
HLA-B27									
2-color									
	HLA-B27	HLA-B7	-	-	-	IM1502		A07739	
HLA-DR									
3-color									
	HLA-DR	CD34	CD45	-	-			A07719	
	HLA-DR	CD13	CD45	-	-			A07720	
	HLA-DR	CD7	CD45	-	-			A07724	
2-color									
	CD3	HLA-DR	-	-	-			A07737	
	CD3	HLA-DR	-	-	-	IM1295U			
	HLA-DR	CD8	-	-	-	IM1199U			
	HLA-DR	CD3	-	-	-	IM1300			
Kappa									
3-color									
	Kappa	Lambda	CD19	-	-			A07706	
Lactoferrin									
2-color									
	MPO	Lactoferrin	-	-	-	IM2743			
Lambda									
3-color									
	Kappa	Lambda	CD19	-	-			A07706	

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	Part Number			
						RUO	ASR	CE	IVD
MPO									
3-color									
	MPO	CD79a	CD3	-	-			A07705	
2-color									
	MPO	Lactoferrin	-	-	-	IM2743			

Neg.Ctrl.									
3-color									
	Neg.Ctrl.	Neg.Ctrl.	CD45	-	-			A07729	
	Neg.Ctrl.	Neg.Ctrl.	CD45	-	-			A07729	
	Neg.Ctrl.	Neg.Ctrl.	CD19	-	-			A07730	
	Neg.Ctrl.	Neg.Ctrl.	CD19	-	-			A07730	
	Neg.Ctrl.	Neg.Ctrl.	CD3	-	-			A07731	
	Neg.Ctrl.	Neg.Ctrl.	CD3	-	-			A07731	
	Neg.Ctrl.	Neg.Ctrl.	Neg.Ctrl.	-	-			A07732	
	Neg.Ctrl.	Neg.Ctrl.	Neg.Ctrl.	-	-			A07732	
	Neg.Ctrl.	Neg.Ctrl.	Neg.Ctrl.	-	-			A07732	

IgG1									
3-color									
	CD45	IgG1	-	IgG1	-			6607019	6607019
	CD45	IgG1	-	IgG1	-			6607019	6607019
	IgG1	IgG1	-	IgG1	-	IM1672			
	IgG1	IgG1	-	IgG1	-	IM1672			
	IgG1	IgG1	-	IgG1	-	IM1672			
	IgG1	IgG1	-	CD45	-	IM1673			
	IgG1	IgG1	-	CD45	-	IM1673			
	IgG1	IgG1	-	IgG1	-			6607054	6607054
	IgG1	IgG1	-	IgG1	-			6607054	6607054
	IgG1	IgG1	-	IgG1	-			6607054	6607054
2-color									
	IgG1	IgG1	-	-	-			A07794	
	IgG1	IgG1	-	-	-			A07794	
	IgG1	IgG2a	-	-	-	A10974			
	IgG1	IgG1	-	-	-	IM1388			
	IgG1	IgG1	-	-	-	IM1388			
	IgG1	IgG2a	-	-	-	A17599			
	IgG1	IgG1	-	-	-			6603796	6603796
	IgG1	IgG1	-	-	-			6603796	6603796
	IgG2a	IgG1	-	-	-			6603795	6603795
	IgG2a	IgG1	-	-	-	B09981			

TABLE OF MULTI-COLOR LIQUID REAGENTS

	FITC	PE or RD1	ECD	PC5	PC7	Part Number			
						RUO	ASR	CE	IVD
IgG2a									
2-color									
	IgG1	IgG2a	-	-	-	A10974			
	IgG1	IgG2a	-	-	-	A17599			
	IgG2a	IgG1	-	-	-			6603795	6603795
	IgG2a	IgG2b	-	-	-	6604240			
	IgG2a	IgG1	-	-	-	B09981			

IgG2b									
2-color									
	IgG2a	IgG2b	-	-	-	6604240			

MULTI-COLOR LIQUID REAGENTS

CYTO-STAT

4 COLOR

CD45-FITC/CD4-PE/CD8-ECD/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD4-RD1	SFCI12T4D11	IgG1 (mouse)					
 CD8-ECD	SFCI21Thy2D3	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607013

CD45-FITC/CD56-PE/CD19-ECD/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD56-RD1	N901	IgG1 (mouse)					
 CD19-ECD	J3-119	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607073

3 COLOR

CD8-FITC/CD4-PE/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD8-FITC	SFCI21Thy2D3	IgG1 (mouse)					
 CD4-RD1	SFCI12T4D11	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607053

CD45-FITC/CD4-PE/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD4-RD1	SFCI12T4D11	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607015

CD45-FITC/CD8-PE/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD8-RD1	SFCI21Thy2D3	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607017

CD45-FITC/CD19-PE/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD19-RD1	J3-119	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607072

CD45-FITC/CD56-PE/CD3-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 CD56-RD1	N901	IgG1 (mouse)					
 CD3-PC5	UCHT1	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607071

CD45-FITC/IgG1-PE/IgG1-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD45-FITC	B3821F4A	IgG2b (mouse)					
 IgG1-RD1	2T8-2F5	IgG1 (mouse)					
 IgG1-PC5	2T8-2F5	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607019

IgG1-FITC/IgG1-PE/IgG1-PC5

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 IgG1-FITC	2T8-2F5	IgG1 (mouse)					
 IgG1-RD1	2T8-2F5	IgG1 (mouse)					
 IgG1-PC5	2T8-2F5	IgG1 (mouse)					
50 tests	Liquid	CYTO-STAT	IVD & CE				6607054

MULTI-COLOR LIQUID REAGENTS

2 COLOR

CD2-FITC/CD7-PE

Combination		Clone	Isotype		
●	CD2-FITC	SFCI3Pt2H9	IgG1 (mouse)		
●	CD7-RD1	3A1E-12H7	IgG2b (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	ASR	6604239	

CD3-FITC/CD4-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD4-RD1	SFCI12T4D11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6604929	

CD3-FITC/CD8-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD8-RD1	SFCI21Thy2D3	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6604930	

CD3-FITC/CD19-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD19-RD1	89B	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6605015	

CD3-FITC/CD56-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD56-RD1	N901	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6607068	

CD4-FITC/CD8-PE

Combination		Clone	Isotype		
●	CD4-FITC	SFCI12T4D11	IgG1 (mouse)		
●	CD8-RD1	SFCI21Thy2D3	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6604614	

CD4-FITC/CD29-PE

Combination		Clone	Isotype		
●	CD4-FITC	SFCI12T4D11	IgG1 (mouse)		
●	CD29-RD1	4B4LDC9LDH8	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	ASR	6603799	

CD4-FITC/CD45RA-PE

Combination		Clone	Isotype		
●	CD4-FITC	SFCI12T4D11	IgG1 (mouse)		
●	CD45RA-RD1	2H4LDH11LDB	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	ASR	6603800	

CD8-FITC/CD4-PE

Combination		Clone	Isotype		
●	CD8-FITC	SFCI21Thy2D3	IgG1 (mouse)		
●	CD4-RD1	SFCI12T4D11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6603802	

CD8-FITC/CD56-PE

Combination		Clone	Isotype		
●	CD8-FITC	SFCI21Thy2D3	IgG1 (mouse)		
●	CD56-RD1	N901	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	ASR	6603798	

CD10-FITC/CD19-PE

Combination		Clone	Isotype		
●	CD10-FITC	J5	IgG2a (mouse)		
●	CD19-RD1	HD237	IgG2b (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	ASR	6604241	

CD19-FITC/CD2-PE

Combination		Clone	Isotype		
●	CD19-FITC	89B	IgG1 (mouse)		
●	CD2-RD1	SFCI3Pt2H9	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6603801	

MULTI-COLOR LIQUID REAGENTS

CD45-FITC/CD14-PE

Combination		Clone	Isotype		
	CD45-FITC	KC56	IgG1 (mouse)		
	CD14-RD1	116	IgM (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6603909	

IgG1-FITC/IgG1-PE

Combination		Clone	Isotype		
	IgG1-FITC	2T8-2F5	IgG1 (mouse)		
	IgG1-RD1	2T8-2F5	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6603796	

IgG2a-FITC/IgG1-PE

Combination		Clone	Isotype		
	IgG2a-FITC	7T4-1F5	IgG2a (mouse)		
	IgG1-RD1	2T8-2F5	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	IVD & CE	6603795	

IgG2a-FITC/IgG2b-PE

Combination		Clone	Isotype		
	IgG2a-FITC	7T4-1F5	IgG2a (mouse)		
	IgG2b-RD1	MPC-11	IgG2b (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	CYTO-STAT	RUO	6604240	

IOTest

3 COLOR

CD8-FITC/CD4-PE/CD3-PC7

Combination		Clone	Isotype		
	CD8-FITC	SFC121Thy2D3	IgG1 (mouse)		
	CD4-PE	SFC112T4D11	IgG1 (mouse)		
	CD3-PC7	UCHT1	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	6607103	

CD(14+16)-FITC/CD85k-PE/CD33-PC5

Combination		Clone	Isotype		
	CD(14+16)-FITC	RM052+3G8	IgG2a+IgG1 (mouse)		
	CD85k-PE	ZM3.8	IgG1 (mouse)		
	CD33-PC5	D3HL60.251	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A23413	

CD(14+16)-FITC/CD85k-PE/CD123-PC5

Combination		Clone	Isotype		
	CD(14+16)-FITC	RM052+3G8	IgG2a+IgG1 (mouse)		
	CD85k-PE	ZM3.8	IgG1 (mouse)		
	CD123-PC5	SSDCLY107D2	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A23416	

2 COLOR

CD2-FITC/CD19-PE

Combination		Clone	Isotype		
	CD2-FITC	39C1.5	IgG2a (rat)		
	CD19-PE	J3-119	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1289U	

CD3-FITC/CD4-PE

Combination		Clone	Isotype		
	CD3-FITC	UCHT1	IgG1 (mouse)		
	CD4-PE	13B8.2	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07733	

MULTI-COLOR LIQUID REAGENTS

CD3-FITC/CD8-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD8-PE	B9.11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07734	

CD3-FITC/CD(16+56)-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD(16+56)-PE	3G8+N901	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07735	
50 tests	Liquid	IOTest	RUO	IM2076	

CD3-FITC/CD19-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD19-PE	J3-119	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07736	

CD3-FITC/CD25-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD25-PE	B1.49.9	IgG2a (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2667U	

CD3-FITC/CD56-PC5

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD56-PC5	N901	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	A07415	

CD3-FITC/CD56-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	CD56-PE	N901	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	ASR	IM2075U	

CD3-FITC/HLA-DR-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	HLA-DR-PE	B8.12.2	IgG2b (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1295U	

CD3-FITC/HLA-DR-PE

Combination		Clone	Isotype		
●	CD3-FITC	UCHT1	IgG1 (mouse)		
●	HLA-DR-PE	Immu-357	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07737	

CD4-FITC/CD8-PE

Combination		Clone	Isotype		
●	CD4-FITC	13B8.2	IgG1 (mouse)		
●	CD8-PE	B9.11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	ASR	IM0747U	

CD8-FITC/CD4-PE

Combination		Clone	Isotype		
●	CD8-FITC	B9.11	IgG1 (mouse)		
●	CD4-PE	13B8.2	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	ASR	IM1379U	

CD8-FITC/CD38-PE

Combination		Clone	Isotype		
●	CD8-FITC	B9.11	IgG1 (mouse)		
●	CD38-PE	LS198-4-3	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2695U	

CD19-FITC/CD5-PE

Combination		Clone	Isotype		
●	CD19-FITC	J3-119	IgG1 (mouse)		
●	CD5-PE	BL1a	IgG2a (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1346U	

MULTI-COLOR LIQUID REAGENTS

CD36-FITC/CD235a-PE

Combination		Clone	Isotype		
	CD36-FITC	FA6.152	IgG1 (mouse)		
	CD235a-PE	11E4B-7-6	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2279U	

CD38-FITC/CD8-PE

Combination		Clone	Isotype		
	CD38-FITC	T16	IgG1 (mouse)		
	CD8-PE	B9.11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2673U	

CD45-FITC/CD14-PE

Combination		Clone	Isotype		
	CD45-FITC	Immu19.2	IgG1 (mouse)		
	CD14-PE	RMO52	IgG2a (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07738	

CD45-FITC/CD235a-PE

Combination		Clone	Isotype		
	CD45-FITC	J33	IgG1 (mouse)		
	CD235a-PE	11E4B-7-6	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2280U	

CD45RA-FITC/CD4-PE

Combination		Clone	Isotype		
	CD45RA-FITC	ALB11	IgG1 (mouse)		
	CD4-PE	13B8.2	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM2762	

CD57-FITC/CD8-PE

Combination		Clone	Isotype		
	CD57-FITC	NC1	IgM (mouse)		
	CD8-PE	B9.11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1198	

HLA-B27-FITC/HLA-B7-PE

Combination		Clone	Isotype		
	HLA-B27-FITC	HLA-ABC-m3	IgG2a (mouse)		
	HLA-B7-PE	BB7.1	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07739	
50 tests	Liquid	IOTest	RUO	IM1502	

HLA-DR-FITC/CD3-PE

Combination		Clone	Isotype		
	HLA-DR-FITC	B8.12.2	IgG2b (mouse)		
	CD3-PE	UCHT1	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1300	

HLA-DR-FITC/CD8-PE

Combination		Clone	Isotype		
	HLA-DR-FITC	B8.12.2	IgG2b (mouse)		
	CD8-PE	B9.11	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	IM1199U	

IgG1-FITC/IgG1-PE

Combination		Clone	Isotype		
	IgG1-FITC	679.1Mc7	IgG1 (mouse)		
	IgG1-PE	679.1Mc7	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	CE	A07794	

IgG1-FITC/IgG2a-PE

Combination		Clone	Isotype		
	IgG1-FITC	679.1Mc7	IgG1 (mouse)		
	IgG2a-PE	7T4-1F5	IgG2a (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	A10974	

IgG2a-FITC/IgG1-PE

Combination		Clone	Isotype		
	IgG2a-FITC	7T4-1F5	IgG2a (mouse)		
	IgG1-PE	679.1Mc7	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
50 tests	Liquid	IOTest	RUO	B09981	

MULTI-COLOR LIQUID REAGENTS

MPO-FITC/Lactoferrin-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	MPO-FITC	CLB-MPO-1	IgG2a (mouse)		
	Lactoferrin-PE	CLB13.17	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	IOTest	RUO	IM2743	

IOTest 3

3 COLOR

CD5-FITC/CD7-PE/CD3-ECD

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD5-FITC	BL1a	IgG2a (mouse)		
	CD7-PE	8H8.1	IgG2a (mouse)		
	CD3-ECD	UCHT1	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
25 tests	Liquid	IOTest 3	CE	A07725	

CD5-FITC/CD10-PE/CD19-ECD

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD5-FITC	BL1a	IgG2a (mouse)		
	CD10-PE	ALB1	IgG1 (mouse)		
	CD19-ECD	J3-119	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
25 tests	Liquid	IOTest 3	CE	A07707	

CD5-FITC/CD23-PE/CD19-ECD

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD5-FITC	BL1a	IgG2a (mouse)		
	CD23-PE	9P25	IgG1 (mouse)		
	CD19-ECD	J3-119	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
25 tests	Liquid	IOTest 3	CE	A07710	

CD8-FITC/CD4-PE/CD3-ECD

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD8-FITC	B9.11	IgG1 (mouse)		
	CD4-PE	13B8.2	IgG1 (mouse)		
	CD3-ECD	UCHT1	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
25 tests	Liquid	IOTest 3	CE	A07726	

CD14-FITC/CD13-PE/CD45-ECD

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD14-FITC	RMO52	IgG2a (mouse)		
	CD13-PE	SJ1D1	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
25 tests	Liquid	IOTest 3	CE	A07722	

MULTI-COLOR LIQUID REAGENTS

CD14-FITC/CD16-PE/CD45-ECD

Combination		Clone	Isotype		
	CD14-FITC	RM052	IgG2a (mouse)		
	CD16-PE	3G8	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07715	

CD15-FITC/CD33-PE/CD45-ECD

Combination		Clone	Isotype		
	CD15-FITC	80H5	IgM (mouse)		
	CD33-PE	D3HL60.251	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07721	

CD16-FITC/CD56-PE/CD3-ECD

Combination		Clone	Isotype		
	CD16-FITC	3G8	IgG1 (mouse)		
	CD56-PE	N901	IgG1 (mouse)		
	CD3-ECD	UCHT1	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07728	

CD19-FITC/CD10-PE/CD45-ECD

Combination		Clone	Isotype		
	CD19-FITC	J3-119	IgG1 (mouse)		
	CD10-PE	ALB1	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07713	

CD20-FITC/CD10-PE/CD19-ECD

Combination		Clone	Isotype		
	CD20-FITC	B9E9	IgG2a (mouse)		
	CD10-PE	ALB1	IgG1 (mouse)		
	CD19-ECD	J3-119	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07708	

CD25-FITC/CD4-PE/CD3-ECD

Combination		Clone	Isotype		
	CD25-FITC	B1.49.9	IgG2a (mouse)		
	CD4-PE	13B8.2	IgG1 (mouse)		
	CD3-ECD	UCHT1	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07727	

CD25-FITC/CD11c-PE/CD19-ECD

Combination		Clone	Isotype		
	CD25-FITC	B1.49.9	IgG2a (mouse)		
	CD11c-PE	BU15	IgG1 (mouse)		
	CD19-ECD	J3-119	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07711	

CD34-FITC/CD33-PE/CD45-ECD

Combination		Clone	Isotype		
	CD34-FITC	581	IgG1 (mouse)		
	CD33-PE	D3HL60.251	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07717	

CD34-FITC/CD117-PE/CD45-ECD

Combination		Clone	Isotype		
	CD34-FITC	581	IgG1 (mouse)		
	CD117-PE	104D2D1	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07718	

CD38-FITC/CD56-PE/CD45-ECD

Combination		Clone	Isotype		
	CD38-FITC	T16	IgG1 (mouse)		
	CD56-PE	N901	IgG1 (mouse)		
	CD45-ECD	J33	IgG1 (mouse)		
Size	Format	Line	Status	Part #	
25 tests	Liquid	IOTest 3	CE	A07714	

MULTI-COLOR LIQUID REAGENTS

CD41-FITC/CD235a-PE/CD45-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD41-FITC	P2	IgG1 (mouse)					
 CD235a-PE	11E4B-7-6	IgG1 (mouse)					
 CD45-ECD	J33	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07723			

CD71-FITC/CD33-PE/CD45-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD71-FITC	YDJ1.2.2	IgG1 (mouse)					
 CD33-PE	D3HL60.251	IgG1 (mouse)					
 CD45-ECD	J33	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07716			

CD103-FITC/CD11c-PE/CD19-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 CD103-FITC	2G5	IgG2a (mouse)					
 CD11c-PE	BU15	IgG1 (mouse)					
 CD19-ECD	J3-119	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07712			

FMC7-FITC/CD23-PE/CD19-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 FMC7-FITC	FMC7	IgM (mouse)					
 CD23-PE	9P25	IgG1 (mouse)					
 CD19-ECD	J3-119	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07709			

HLA-DR-FITC/CD13-PE/CD45-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 HLA-DR-FITC	Immu-357	IgG1 (mouse)					
 CD13-PE	SJ1D1	IgG1 (mouse)					
 CD45-ECD	J33	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07720			

HLA-DR-FITC/CD34-PE/CD45-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 HLA-DR-FITC	Immu-357	IgG1 (mouse)					
 CD34-PE	581	IgG1 (mouse)					
 CD45-ECD	J33	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07719			

HLA-DR-FITC/CD7-PE/CD45-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 HLA-DR-FITC	Immu-357	IgG1 (mouse)					
 CD7-PE	8H8.1	IgG2a (mouse)					
 CD45-ECD	J33	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07724			

Kappa-FITC/Lambda-PE/CD19-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 Kappa-FITC	Polyclonal	F(ab') ₂ (rabbit)					
 Lambda-PE	Polyclonal	F(ab') ₂ (rabbit)					
 CD19-ECD	J3-119	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07706			

cMPO-FITC/cCD79a-PE/cCD3-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 MPO-FITC	CLB-MPO-1	IgG2a (mouse)					
 CD79a-PE	HM47	IgG1 (mouse)					
 CD3-ECD	UCHT1	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07705			

Neg.Ctrl.-FITC/Neg.Ctrl.-PE/CD3-ECD

Combination	Clone	Isotype	Size	Format	Line	Status	Part #
 Neg.Ctrl.-FITC	679.1Mc7	IgG1 (mouse)					
 Neg.Ctrl.-PE	679.1Mc7	IgG1 (mouse)					
 CD3-ECD	UCHT1	IgG1 (mouse)					
Size	Format	Line	Status	Part #			
25 tests	Liquid	IOTest 3	CE	A07731			

MULTI-COLOR LIQUID REAGENTS

Neg.Ctrl.-FITC/Neg.Ctrl.-PE/CD19-ECD

Combination		Clone	Isotype	
	Neg.Ctrl.-FITC	679.1Mc7	IgG1 (mouse)	
	Neg.Ctrl.-PE	679.1Mc7	IgG1 (mouse)	
	CD19-ECD	J3-119	IgG1 (mouse)	
Size	Format	Line	Status	Part #
25 tests	Liquid	IOtest 3	CE	A07730

Neg.Ctrl.-FITC/Neg.Ctrl.-PE/CD45-ECD

Combination		Clone	Isotype	
	Neg.Ctrl.-FITC	679.1Mc7	IgG1 (mouse)	
	Neg.Ctrl.-PE	679.1Mc7	IgG1 (mouse)	
	CD45-ECD	J33	IgG1 (mouse)	
Size	Format	Line	Status	Part #
25 tests	Liquid	IOTest 3	CE	A07729

Neg.Ctrl.-FITC/Neg.Ctrl.-PE/Neg.Ctrl.-ECD

Combination		Clone	Isotype	
	Neg.Ctrl.-FITC	679.1Mc7	IgG1 (mouse)	
	Neg.Ctrl.-PE	679.1Mc7	IgG1 (mouse)	
	Neg.Ctrl.-ECD	679.1Mc7	IgG1 (mouse)	
Size	Format	Line	Status	Part #
25 tests	Liquid	IOTest 3	CE	A07732

OptiClone

3 COLOR

CD3-FITC/CD4-PE/CD45-PC5

Combination		Clone	Isotype	
	CD3-FITC	UCHT1	IgG1 (mouse)	
	CD4-PE	13B8.2	IgG1 (mouse)	
	CD45-PC5	Immu19.2	IgG1 (mouse)	
Size	Format	Line	Status	Part #
50 tests	Liquid	OptiClone	RUO	IM1651

CD3-FITC/CD8-PE/CD45-PC5

Combination		Clone	Isotype	
	CD3-FITC	UCHT1	IgG1 (mouse)	
	CD8-PE	B9.11	IgG1 (mouse)	
	CD45-PC5	Immu19.2	IgG1 (mouse)	
Size	Format	Line	Status	Part #
50 tests	Liquid	OptiClone	RUO	IM1670

CD3-FITC/CD19-PE/CD45-PC5

Combination		Clone	Isotype	
	CD3-FITC	UCHT1	IgG1 (mouse)	
	CD19-PE	J3-119	IgG1 (mouse)	
	CD45-PC5	Immu19.2	IgG1 (mouse)	
Size	Format	Line	Status	Part #
50 tests	Liquid	OptiClone	RUO	IM1671

CD4-FITC/CD8-PE/CD3-PC5

Combination		Clone	Isotype	
	CD4-FITC	13B8.2	IgG1 (mouse)	
	CD8-PE	B9.11	IgG1 (mouse)	
	CD3-PC5	UCHT1	IgG1 (mouse)	
Size	Format	Line	Status	Part #
50 tests	Liquid	OptiClone	RUO	IM1650

IgG1-FITC/IgG1-PE/CD45-PC5

Combination		Clone	Isotype	
	IgG1-FITC	679.1Mc7	IgG1 (mouse)	
	IgG1-PE	679.1Mc7	IgG1 (mouse)	
	CD45-PC5	Immu19.2	IgG1 (mouse)	
Size	Format	Line	Status	Part #
50 tests	Liquid	OptiClone	RUO	IM1673

MULTI-COLOR LIQUID REAGENTS

IgG1-FITC/IgG1-PE/IgG1-PC5

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	IgG1-FITC	679.1Mc7	IgG1 (mouse)		
	IgG1-PE	679.1Mc7	IgG1 (mouse)		
	IgG1-PC5	679.1Mc7	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1672	

2 COLOR

CD3-FITC/CD4-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD3-FITC	UCHT1	IgG1 (mouse)		
	CD4-PE	13B8.2	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1382	

CD3-FITC/CD8-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD3-FITC	UCHT1	IgG1 (mouse)		
	CD8-PE	B9.11	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1383	

CD3-FITC/CD19-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD3-FITC	UCHT1	IgG1 (mouse)		
	CD19-PE	J3-119	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1384	

CD4-FITC/CD8-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD4-FITC	13B8.2	IgG1 (mouse)		
	CD8-PE	B9.11	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1385	

CD45-FITC/CD14-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	CD45-FITC	Immu19.2	IgG1 (mouse)		
	CD14-PE	RMO52	IgG2a (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1387	

IgG1-FITC/IgG1-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	IgG1-FITC	679.1Mc7	IgG1 (mouse)		
	IgG1-PE	679.1Mc7	IgG1 (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	IM1388	

IgG1-FITC/IgG2a-PE

<i>Combination</i>		<i>Clone</i>	<i>Isotype</i>		
	IgG1-FITC	679.1Mc7	IgG1 (mouse)		
	IgG2a-PE	7T4-1F5	IgG2a (mouse)		
<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>	
50 tests	Liquid	OptiClone	RUO	A17599	

TABLE OF SINGLE-COLOR LIQUID REAGENTS

	FITC	AF 488	PE	ECD	PC5	PC 5.5	PC7	AF 647	APC	APC A700	APC A750	PB	KrO	Page
7.1 (NG2 antigen)			•											125
APO2.7			•											125
CD1a	•		•		•				•					126
CD1c						•								126
CD2	•		•	•	•		•		•	•	•	•		126
CD3	•		•	•	•	•	•		•	•	•	•	•	127
CD4	•		•	•	•	•	•		•	•	•	•	•	127
CD5	•		•	•	•	•	•		•	•	•	•		128
CD6	•													128
CD7	•		•	•	•		•		•	•	•	•		129
CD8	•		•	•	•	•	•		•	•	•	•	•	129
CD8 β	•		•	•	•									130
CD9	•										•	•		130
CD10	•		•	•	•	•	•		•	•	•			130
CD11a	•		•											131
CD11b	•		•		•		•		•		•	•		131
CD11c			•		•	•	•		•	•				132
CD13	•		•	•	•	•	•		•					132
CD14	•		•	•	•	•	•		•	•	•	•	•	133
CD15	•		•		•							•	•	133
CD16	•		•	•	•		•		•	•	•	•	•	134
CD16b	•													134
CD18	•		•			•								134
CD19	•		•	•	•	•	•		•	•	•	•	•	135
CD20	•		•	•	•	•	•		•	•	•	•		135
CD21	•		•									•		136
CD22	•		•	•	•	•	•		•	•		•		136
CD23	•		•	•			•		•	•		•		137
CD24			•	•	•	•			•		•			137
CD25	•		•	•	•	•	•		•	•	•	•		138
CD26			•											138
CD27			•	•	•	•	•		•		•	•		138
CD28	•		•	•	•	•	•		•	•	•			139
CD29	•		•											139
CD30			•						•	•				139
CD31	•		•									•		140
CD32			•										•	140
CD33	•		•		•	•	•		•		•			140

For abbreviations see Information section

TABLE OF SINGLE-COLOR LIQUID REAGENTS

	FITC	AF 488	PE	ECD	PC5	PC 5.5	PC7	AF 647	APC	APC A700	APC A750	PB	KrO	Page
CD34	•		•	•	•		•		•	•	•			141
CD35	•													141
CD36	•								•	•		•		142
CD37	•		•											142
CD38	•		•	•	•	•	•		•	•	•	•		142
CD40			•			•			•					143
CD41	•		•	•	•		•		•					143
CD42a	•													144
CD42b	•		•						•					144
CD43	•		•								•			144
CD44	•		•								•	•		144
CD45	•	•	•	•	•	•	•	•	•	•	•	•	•	145
CD45RA	•		•	•			•		•		•	•		146
CD45RO	•		•	•		•	•							146
CD48	•			•										146
CD49b	•													147
CD49d	•								•		•			147
CD49e	•													147
CD50			•											147
CD54	•		•											148
CD55	•		•											148
CD56			•	•	•	•	•		•	•	•			148
CD57	•											•		149
CD58	•		•		•				•					149
CD59	•													149
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CD62P	•		•											150
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CD66b	•								•		•			151
CD66c	•		•											151
CD69			•	•	•		•		•					152
CD71	•		•							•	•			152
CD79a			•		•	•			•					152
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For abbreviations see Information section

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CD81	•		•						•			•		154
CD83	•		•		•									154
CD85d			•											154
CD85j			•						•					155
CD85k					•		•							155
CD86			•			•	•				•			156
CD90	•		•		•						•	•		156
CD94			•						•					157
CD95	•		•											157
CD103	•								•					157
CD105			•				•							158
CD106			•											158
CD107a									•			•		158
CD109			•											159
CD116			•											159
CD117			•	•	•	•	•		•		•			159
CD118			•											160
CD120a			•											160
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CD122	•						•							161
CD123			•	•		•	•		•	•				161
CD126			•											162
CD127	•		•		•		•		•	•	•			162
CD134									•					162
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CD141	•													163
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CD146			•		•									163
CD152			•											164
CD154			•											164
CD157	•													164
CD158a,h			•			•	•		•					164
CD158b1/b2,j			•			•	•		•					165
CD158e1/e2			•						•					165
CD158f			•						•					166
CD158i			•						•					166
CD159a			•				•		•					167

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TABLE OF SINGLE-COLOR LIQUID REAGENTS

	FITC	AF 488	PE	ECD	PC5	PC 5.5	PC7	AF 647	APC	APC A700	APC A750	PB	KrO	Page
CD160			•											167
CD161			•				•				•			168
CD166			•											168
CD179a			•											169
CD184			•											169
CD197			•				•							170
CD200							•				•			170
CD203c			•				•							171
CD206			•				•					•		171
CD207			•											171
CD209			•											172
CD235a	•		•			•	•				•			172
CD243			•											172
CD244			•			•								173
CD274							•		•					173
CD278			•						•					174
CD279			•			•	•		•					174
CD294	•		•											175
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CD314			•						•					176
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CD335			•		•		•							177
CD336			•		•									178
CD337			•		•									178
Clec9A									•					179
Cyclin A2	•		•											179
Cytokeratin	•													179
DAP12			•											180
FMC7	•											•		180
FoxP3			•				•	•						180
HIV-1 core antigen	•		•											180
HLA-ABC	•													181
HLA-DR	•		•	•	•	•	•		•		•	•	•	181
HLA-DR, DP, DQ	•		•											181
IFN-γ	•		•									•		182
IgD	•		•						•					182
IgM	•		•						•			•		182

For abbreviations see Information section

TABLE OF SINGLE-COLOR LIQUID REAGENTS

	FITC	AF 488	PE	ECD	PC5	PC 5.5	PC7	AF 647	APC	APC A700	APC A750	PB	KrO	Page
IL-2			•											182
IL-4			•											183
IL-5R α			•											183
κ Chain	•													184
λ Chain			•											184
Lactoferrin			•											184
MNDA	•													184
Myeloperoxidase	•		•			•								185
NKp80			•											185
NTB-A			•											185
OSCAR			•											186
p-Akt								•						186
p-Erk1/2		•												187
p-S6 Ribosomal Protein												•		187
p-Stat5			•											188
TCR PAN α/β			•		•				•					188
TCR PAN γ/δ	•		•		•	•	•							188
TCR V α 24	•		•				•							189
TCR V β 1	•		•				•							189
TCR V β 2	•		•											189
TCR V β 3	•													189
TCR V β 4	•		•											190
TCR V β 5.1	•		•											190
TCR V β 5.2	•		•											190
TCR V β 5.3			•											190
TCR V β 7.1	•		•											191
TCR V β 7.2	•		•											191
TCR V β 8	•		•											191
TCR V β 9			•											191
TCR V β 11	•		•						•					192
TCR V β 12	•		•											192
TCR V β 13.1	•		•											192
TCR V β 13.2			•											192
TCR V β 13.6	•		•											193
TCR V β 14	•		•											193
TCR V β 16	•													193
TCR V β 17	•		•											193
TCR V β 18			•											194

For abbreviations see Information section

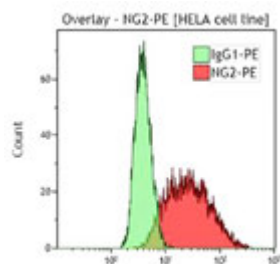
TABLE OF SINGLE-COLOR LIQUID REAGENTS

	FITC	AF 488	PE	ECD	PC5	PC 5.5	PC7	AF 647	APC	APC A700	APC A750	PB	KrO	Page
TCR V β 20	•		•											194
TCR V β 21.3	•													194
TCR V β 22	•		•											194
TCR V β 23			•											195
TCR V δ 2	•											•		195
TCR V γ 9	•				•									195
TCR ζ			•											196
TdT	•													196
Thrombin receptor			•											196
TIA-1			•											196
TNF α			•											197
ZAP-70			•											197

SINGLE-COLOR LIQUID REAGENTS

7.1 (NG2 antigen)

Human melanoma-associated chondroitin sulfate proteoglycan (MCSP), known as the homolog rat NG2 antigen, is a 250 kDa glycoprotein that is thought to play important roles in angiogenesis-dependent processes like wound healing and tumor growth. The core protein contains an open frame of 2322 amino acids encompassing a large extracellular domain, a hydrophobic transmembrane region and a relatively short cytoplasmic tail. This antigen is not expressed on normal hematopoietic cells but can be expressed on myeloid and lymphoid cell subsets with chromosomal modifications. It is also expressed on human glial cells. This antigen regulates signaling events that are important for both cell proliferation and cell migration through at least two distinct mechanisms: the focal adhesion kinase (FAK) and the extracellular signal-regulated kinases (ERK) 1/2.

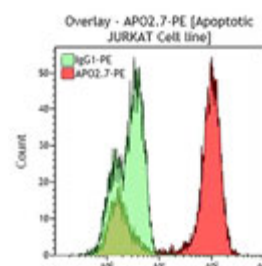


HELA cell line.

Clone: 7.1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3454U	Liquid	IOTest

APO2.7 (7A6)

The APO2.7 antigen (also named 7A6 antigen) recognized by clone 2.7A6A3 is a 38 kDa protein localized on the membrane of mitochondria whose expression appears to be restricted to cells undergoing apoptosis. The APO2.7 antigen can be detected after apoptosis induction via CD95/Fas ligation, irradiation or drug treatment. Expression of APO2.7 appears as an early event in the apoptosis process. Normal viable cells are negative or weakly positive for APO2.7. Research studies have shown that less than 2% of peripheral T cells from normal donors expressed the APO2.7 antigen. Some level of APO2.7 expression associated with an ongoing apoptotic process has been demonstrated in activated T cells.



Apoptotic Jurkat cell line

Clone: 2.7A6A3 (APO2.7)			Isotype: IgG1 Mouse		
Use of APO2.7 allows for precise monitoring of the early and late cellular responses during apoptosis.					
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2088U	Liquid	IOTest

β2-microglobulin

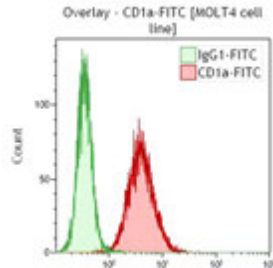
The β2-microglobulin is the non-polymorphic non-covalently bound light chain (12 kDa) of the class I major histocompatibility complex (MHC-I) constitutively expressed on the surface of almost all nucleated cell. β2-microglobulin structure, stabilized by a disulfide bond, is similar to an immunoglobulin like domain. β2-microglobulin is required in the endoplasmic reticulum (ER) to associate with the MHC class I heavy molecule to form with other proteins (calreticulin, tapasin, etc.) the loading complex that exits the ER and is transported to the cell surface. After peptide presentation, β2-microglobulin is actively released into circulation.

Clone: B1G6			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0114	Freeze-dried	-

SINGLE-COLOR LIQUID REAGENTS

CD1a

The CD1a antigen is a membrane glycoprotein with a molecular weight of 49 kDa expressed in association with β 2-microglobulin. This antigen is found on cortical thymocytes (strongly), Langerhans cells and interdigitating cells. The CD1a antigen is also present on a B cell subset. CD1a antibodies are useful in the definition of the thymic stage of T cells.



MOLT4 cell line

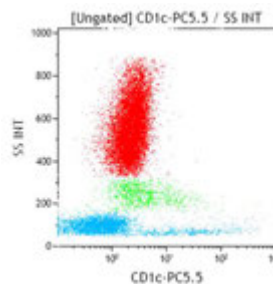
Clone: SFC19Thy1A8 (T6) Isotype: IgG1 Mouse
T6 (ref 6T-CD1.7) was used as a CD1a reference monoclonal antibody during HLDA 6.

Form	Size	Status	Part#	Format	Line
RD1	100 tests	RUO	6603185	Liquid	COULTER CLONE

Clone: BL6 Isotype: IgG1 Mouse					
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B25330	Liquid	IOTest
PE	100 tests	CE	A07742	Liquid	IOTest
PE	2 mL	ASR	IM1942U	Liquid	IOTest
PC5	1 mL	ASR	IM3610	Liquid	IOTest
APC	1 mL	ASR	IM3645	Liquid	IOTest

CD1c

The CD1c antigen is a membrane glycoprotein with a molecular weight of 43 kDa expressed in association with β 2-microglobulin. It is found on cortical thymocytes (weakly), Langerhans cells, dendritic cells and a subset of B cells, early during ontogeny.

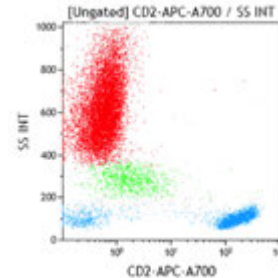


Lysed normal whole blood sample.

Clone: L161 Isotype: IgG1 Mouse					
Form	Size	Status	Part#	Format	Line
PC5.5	0.5 mL	ASR	B46036	Liquid	IOTest

CD2

The CD2 antigen (LFA-2) is a monomeric 50 kDa glycoprotein. It was formerly described as the sheep red blood cell receptor, causing T-cell rosetting, and has been identified as the ligand for CD58 (LFA-3). It is also a receptor for CD48, CD59 and CD15, which binds to the multimeric form of CD2. CD2 is present on the majority of normal human peripheral blood T lymphocytes and a high percentage of NK cells. It is also expressed by all thymocytes.



Lysed normal whole blood sample.

Clone: SFC13Pt2H9 (T11) Isotype: IgG1 Mouse
SFC13Pt2H9 inhibits sheep erythrocyte rosette formation. It has been used as a CD2 reference monoclonal antibody during HLDA 6 (ref.6T-CD2.6).

Form	Size	Status	Part#	Format	Line
FITC	100 tests	IVD & CE	6602389	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6603863	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6602868	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6603849	Liquid	CYTO-STAT

Clone: 39C1.5 Isotype: IgG2a Rat
39C1.5 inhibits sheep erythrocyte rosette formation. It has been used as a CD2 reference monoclonal antibody during HLDA 6 (ref 6T-CD2.7).

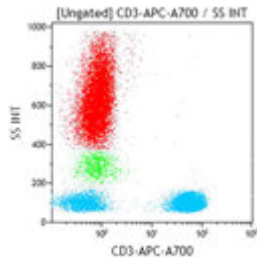
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07743	Liquid	IOTest
FITC	2 mL	ASR	IM0442U	Liquid	IOTest
PE	100 tests	CE	A07744	Liquid	IOTest
PE	2 mL	ASR	IM0443U	Liquid	IOTest
ECD	0.5 mL	ASR	B46023	Liquid	IOTest
PC5	100 tests	CE	A07745	Liquid	IOTest
PC5	1 mL	ASR	IM2634U	Liquid	IOTest
PC7	1 mL	ASR	A51074	Liquid	IOTest
PC7	100 tests	CE	A21689	Liquid	IOTest
APC	1 mL	ASR	A60794	Liquid	IOTest
APC-A700	0.5 mL	ASR	B12111	Liquid	IOTest
APC-A750	0.5 mL	ASR	B01681	Liquid	IOTest
PB	0.5 mL	ASR	B09685	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD3

CD3 ζ see TCR ζ in Human non-CD antigens section.

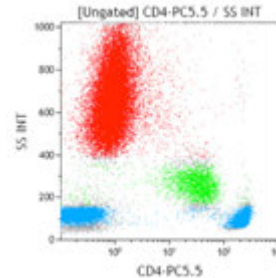
The CD3 antigen is a complex of 5 invariable polypeptidic chains, γ , δ , ϵ , ζ and η , whose molecular weights are respectively 25-28, 21, 20, 16 and 22 kDa. The ζ chain occurs in the CD3 complex as a disulphide linked homodimer or as a heterodimer with the η chain. CD3 is part of a bigger complex which includes the T Cell Receptor (TCR). This complex is expressed by mature T cells and by thymocytes. T cell activation may be induced when a foreign antigen is presented to the TCR through MHC complex.



Lysed normal whole blood sample.

CD4

The CD4 antigen is a single-chain transmembrane glycoprotein with a 59 kDa molecular weight. CD4 binds to a non-polymorphic region of MHC Class II molecules and is a co-receptor in MHC Class II restricted antigen-induced activation. CD4 is expressed on the T "helper" lymphocytes. It is present on most thymocytes where it is frequently co-expressed with CD8. CD4 is also expressed on all monocytes, although with a lower density than on T lymphocytes. CD4⁺ T lymphocytes are active in inducing and helping the synthesis of immunoglobulins by B cells. CD4 is a receptor for the Human Immunodeficiency Virus type I (HIV-1) envelope protein gp120.



Lysed normal whole blood sample.

Clone: UCHT1

Isotype: IgG1 Mouse

UCHT1 reacts with the ϵ -chain of the CD3 complex. It was used as a CD3 reference mAb (ref.6T-CD3.1) during HLDA 6. It may be used to detect intracytoplasmic CD3.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	A83481	Freeze-dried	COULTER CLONE
UNLB	2 mL	ASR	IM1280	Liquid	-
UNLB	0.2 mg	ASR	IM1304	Freeze-dried	-
FITC	50 tests	IVD & CE	6604623	Liquid	CYTO-STAT
FITC	100 tests	IVD & CE	6604625	Freeze-dried	COULTER CLONE
FITC	100 tests	CE	A07746	Liquid	IOTest
FITC	2 mL	ASR	IM1281U	Liquid	IOTest
PE	100 tests	CE	A07747	Liquid	IOTest
PE	2 mL	ASR	IM1282U	Liquid	IOTest
RD1	50 tests	IVD & CE	6604621	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6604627	Liquid	COULTER CLONE
ECD	100 tests	CE	A07748	Liquid	IOTest
ECD	1 mL	ASR	IM2705U	Liquid	IOTest
PC5	0.5 mL	ASR	6607010	Liquid	CYTO-STAT
PC5	100 tests	CE	A07749	Liquid	IOTest
PC5	1 mL	ASR	IM2635U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A66327	Liquid	IOTest
PC7	100 tests	RUO	6607100	Liquid	IOTest
PC7	100 tests	CE	737657	Liquid	IOTest
APC	100 tests	CE	IM2467	Liquid	IOTest
APC	1 mL	ASR	IM2467U	Liquid	IOTest
APC-A700	0.5 mL	ASR	B10823	Liquid	IOTest
APC-A750	0.5 mL	ASR	A66329	Liquid	IOTest
APC-A750	50 tests	CE	A94680	Liquid	IOTest
PB	0.5 mL	ASR	A93687	Liquid	IOTest
KrO	0.5 mL	ASR	B00068	Liquid	IOTest

Clone: 13B8.2

Isotype: IgG1 Mouse

13B8.2 monoclonal antibody antagonizes HIV effects *in vitro*.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0398	Freeze-dried	-
Biot	0.2 mg	ASR	IM0704	Freeze-dried	-
FITC	100 tests	CE	A07750	Liquid	IOTest
FITC	2 mL	ASR	IM0448U	Liquid	IOTest
PE	100 tests	CE	A07751	Liquid	IOTest
PE	2 mL	ASR	IM0449U	Liquid	IOTest
PC5	100 tests	CE	A07752	Liquid	IOTest
PC5	1 mL	ASR	IM2636U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B16491	Liquid	IOTest
APC	100 tests	CE	IM2468	Liquid	IOTest
APC	1 mL	ASR	IM2468U	Liquid	IOTest
APC-A700	0.5 mL	ASR	B10824	Liquid	IOTest
APC-A750	50 tests	CE	A94682	Liquid	IOTest
APC-A750	0.5 mL	ASR	A94685	Liquid	IOTest
PB	0.5 mL	ASR	A82789	Liquid	IOTest
KrO	0.5 mL	ASR	A96417	Liquid	IOTest

Clone: SFC112T4D11 (T4)

Isotype: IgG1 Mouse

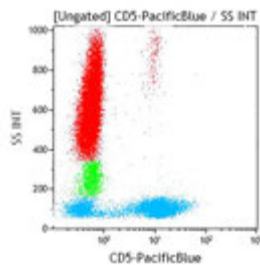
SFC112T4D11 monoclonal antibody antagonizes HIV effects *in vitro*.

Form	Size	Status	Part#	Format	Line
FITC	100 tests	IVD & CE	6602393	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6603862	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6602864	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6603850	Liquid	CYTO-STAT
ECD	0.5 mL	ASR	6604727	Liquid	CYTO-STAT
PC7	100 tests	RUO	6607101	Liquid	IOTest
PC7	100 tests	CE	737660	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD5

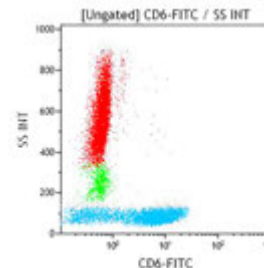
The CD5 antigen is a single-chain transmembrane glycoprotein with a molecular weight of 67 kDa. The extracellular domain consists of 3 scavenger receptor cysteine-rich (SRCR) domains of approximately 100 amino acids each. CD5 is found on all mature T lymphocytes and on most thymocytes. CD5 is also present on a B lymphocyte subset but is not found on granulocytes or monocytes. CD5 is a ligand for the CD72 antigen, which is present on B lymphocytes. The CD5⁺ B lymphocyte subset (known as B-1a lymphocytes) may arise from a non-conventional B lineage (independent of bone marrow).



Lysed normal whole blood sample.

CD6

The CD6 antigen is a single-chain type I transmembrane glycoprotein with three extracellular SRCR domains. It exists predominantly in two isoforms as 100 kDa and 130 kDa. CD6 is an extensively glycosylated molecule and differences in glycosylation patterns may occur. The CD6 molecule is modified by phosphorylation of serine, threonine and tyrosine residues during T-cell activation. CD6 have a role as a costimulatory molecule for T-cell activation and in cell adhesion. CD166 was identified as an adhesion receptor for CD6. The CD6 antigen is expressed on the surface of most mature human T cells and a subset of resting B cells and medullary thymocytes. It is found on NK cells not it is reported to be on any other cells.



Lysed normal whole blood sample.

Clone: SFCI24T6G12 (T1) Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
RD1	100 tests	IVD & CE	6603020	Liquid	COULTER CLONE

Clone: BL1a Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A08932	Liquid	IOTest
FITC	2 mL	ASR	IM0468U	Liquid	IOTest
PE	100 tests	CE	A07753	Liquid	IOTest
PE	2 mL	ASR	IM0469U	Liquid	IOTest
ECD	1 mL	ASR	A33096	Liquid	IOTest
PC5	100 tests	CE	A07754	Liquid	IOTest
PC5	1 mL	ASR	IM2637U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A70203	Liquid	IOTest
PC7	1 mL	ASR	A51075	Liquid	IOTest
PC7	100 tests	CE	A21690	Liquid	IOTest
APC	1 mL	ASR	A60790	Liquid	IOTest
APC-A700	0.5 mL	ASR	A78835	Liquid	IOTest
APC-A750	0.5 mL	ASR	A78836	Liquid	IOTest
PB	0.5 mL	ASR	A82790	Liquid	IOTest

Clone: CLB-T1/1 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
ECD	0.5 mL	ASR	B55387	Liquid	IOTest
APC	0.5 mL	ASR	B55386	Liquid	IOTest

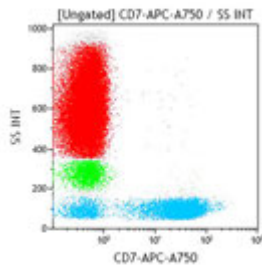
Clone: 2H46D3B Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B16492	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD7

The CD7 antigen is a single-chain protein with a molecular weight of 40 kDa. It is expressed on T lymphocyte precursors, prior to thymic homing. CD7 antigen is found on thymocytes and on the majority of peripheral blood T lymphocytes. It is also expressed on most NK cells, pre-B lymphocytes and weakly on monocytes. Mature B lymphocytes and granulocytes do not express this antigen.



Lysed normal whole blood sample.

Clone: 3A1E-12H7 Isotype: IgG2b Mouse

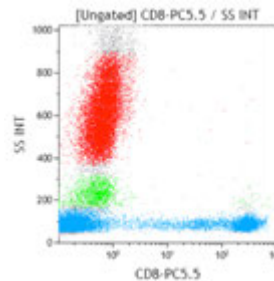
Form	Size	Status	Part#	Format	Line
FITC	0.5 mL	ASR	6603824	Liquid	CYTO-STAT
FITC	0.1 mg	ASR	6603825	Freeze-dried	COULTER CLONE
RD1	0.5 mL	ASR	6603822	Liquid	CYTO-STAT
RD1	0.5 mL	ASR	6603827	Liquid	COULTER CLONE

Clone: 8H8.1 Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07755	Liquid	IOTest
FITC	2 mL	ASR	IM0585U	Liquid	IOTest
PE	2 mL	ASR	IM1429U	Liquid	IOTest
ECD	1 mL	ASR	A70202	Liquid	IOTest
PC5	100 tests	CE	IM3613	Liquid	IOTest
PC5	1 mL	ASR	IM3613U	Liquid	IOTest
PC7	1 mL	ASR	A46526	Liquid	IOTest
APC	0.5 mL	ASR	A97050	Liquid	IOTest
APC-A700	0.5 mL	ASR	A70201	Liquid	IOTest
APC-A700	50 tests	CE	B36290	Liquid	IOTest
APC-A750	0.5 mL	ASR	B16892	Liquid	IOTest
PB	0.5 mL	ASR	B06499	Liquid	IOTest

CD8

The CD8 antigen is a disulfide-linked dimer, which exists either as a CD8 α homodimer or as a CD8 α / β heterodimer. CD8 α is required for surface expression of CD8 β . The molecular weight of each monomer of α or β is approximately 32-34 kDa. CD8 binds to a non-polymorphic domain ($\alpha 3$ domain) of MHC Class I molecules. CD8 is expressed on a subset of human peripheral blood T lymphocytes. A subset of NK cells possess the CD8 antigen but show low to medium density of expression. CD8 α homodimer is expressed by NK cells and γ/δ^+ T cells. CD8 is also present on most thymocytes where it is frequently co-expressed with CD4, and on a subpopulation of bone marrow cells. The CD8 molecule acts with the T Cell Receptor (TCR) as a coreceptor for MHC class I restricted antigen recognition. CD8 is widely used as a marker of cytotoxic T lymphocytes.



Lysed normal whole blood sample.

Clone: B9.11 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0102	Freeze-dried	-
FITC	100 tests	CE	A07756	Liquid	IOTest
FITC	2 mL	ASR	IM0451U	Liquid	IOTest
PE	100 tests	CE	A07757	Liquid	IOTest
PE	2 mL	ASR	IM0452U	Liquid	IOTest
ECD	0.5 mL	ASR	B08467	Liquid	IOTest
PC5	100 tests	CE	A07758	Liquid	IOTest
PC5	1 mL	ASR	IM2638U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B21205	Liquid	IOTest
APC	100 tests	CE	IM2469	Liquid	IOTest
APC	1 mL	ASR	IM2469U	Liquid	IOTest
APC-A700	0.5 mL	ASR	A66332	Liquid	IOTest
APC-A750	50 tests	CE	A94683	Liquid	IOTest
APC-A750	0.5 mL	ASR	A94686	Liquid	IOTest
PB	0.5 mL	ASR	A82791	Liquid	IOTest
KrO	0.5 mL	ASR	B00067	Liquid	IOTest

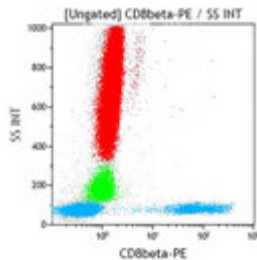
Clone: SFC121Thy2D3 (T8) Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
FITC	100 tests	IVD & CE	6602385	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6603861	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6603274	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6603848	Liquid	CYTO-STAT
ECD	0.5 mL	ASR	6604728	Liquid	CYTO-STAT
ECD	50 tests	CE	737659	Liquid	CYTO-STAT
PC5	0.5 mL	ASR	6607011	Liquid	CYTO-STAT
PC5.5	0.5 mL	ASR	A99019	Liquid	IOTest
PC7	100 tests	RUO	6607102	Liquid	IOTest
PC7	100 tests	CE	737661	Liquid	IOTest
APC	0.5 mL	ASR	A99023	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD8 β

Along with CD8 α , the CD8 β polypeptide molecule is one of the two chains which can be expressed within the CD8 dimer. CD8 α is required for surface expression of CD8 β . The α and β glycoproteins have similar molecular weights of 32-34 kDa each. The CD8 α/β heterodimer is expressed by TCR α/β^+ CD8 $^+$ T cells whereas TCR γ/δ^+ CD8 $^+$ T cells and CD8 $^+$ NK cells exclusively express the CD8 α/α homodimer.

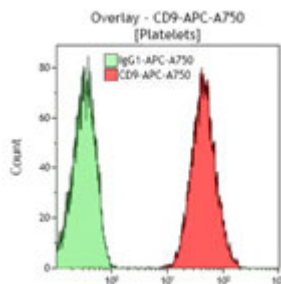


Lysed normal whole blood sample.

Clone: 2ST8.5H7		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM2014	Freeze-dried	-
FITC	1 mL	ASR	B42025	Liquid	IOTest
PE	2 mL	ASR	IM2217U	Liquid	IOTest
ECD	100 tests	RUO	6607123	Liquid	IOTest
PC5	100 tests	RUO	6607109	Liquid	IOTest

CD9

CD9 (p24 antigen) is a single transmembrane polypeptide of 24 kDa related to the tetraspanin (TM4) family. Like other tetraspanins (e. g. CD63, CD81, CD82, CD37, CD53, among the 20 known members), CD9 structure is composed of 4 transmembrane domains, with intracellular N and C termini. First discovered on a lymphoblastic cell line of pre-B phenotype, CD9 was then found on platelets and within their α -granules, on monocytes, pre-B cells, eosinophils, basophils and activated T cells. The CD9 molecule associates with other surface proteins such as the $\alpha 6/\beta 4$ integrin (CD49f/CD104 molecule) and HLA-DR, suggesting a role in adhesion, signal transduction and cell motility.

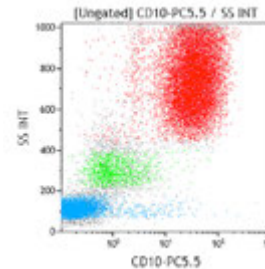


Platelet-rich plasma (PRP) from normal whole blood.

Clone: ALB6		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0117	Freeze-dried	-
FITC	2 mL	ASR	IM1755U	Liquid	IOTest
APC-A750	0.5 mL	ASR	B13649	Liquid	IOTest
PB	0.5 mL	ASR	B09979	Liquid	IOTest

CD10

The CD10 antigen is referred to as the Common Acute Lymphoblastic Leukemia Antigen (CALLA). It is a type II integral membrane protein of 100 kDa, identified as the human membrane-associated neutral endopeptidase (EC3.4.24.11). It is expressed on uncommitted lymphoid precursors. CD10 expression is lost as cells enter the T lineage. In the B lineage, CD10 expression is lost later in ontogeny, as cells acquire surface Ig expression. It is also expressed on activated and proliferating B cells in the germinal center, and on neutrophils as well as on bone marrow stromal cells. It is also expressed on a number of other cells of epithelial origin.



Lysed normal whole blood sample.

Clone: J5		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
FITC	0.5 mg	ASR	6602463	Freeze-dried	COULTER CLONE
FITC	0.5 mL	ASR	6604107	Liquid	CYTO-STAT
RD1	0.5 mL	ASR	6603475	Liquid	COULTER CLONE
RD1	0.5 mL	ASR	6604120	Liquid	CYTO-STAT

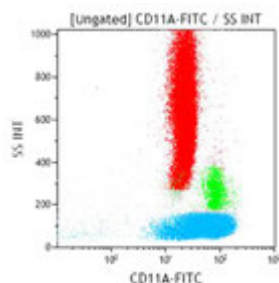
Clone: ALB1		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07759	Liquid	IOTest
FITC	2 mL	ASR	IM2720U	Liquid	IOTest
PE	100 tests	CE	A07760	Liquid	IOTest
PE	2 mL	ASR	IM1915U	Liquid	IOTest
ECD	1 mL	ASR	IM3608U	Liquid	IOTest
PC5	100 tests	CE	A07761	Liquid	IOTest
PC5	1 mL	ASR	IM2721U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B16490	Liquid	IOTest
PC7	1 mL	ASR	A46527	Liquid	IOTest
APC	1 mL	ASR	IM3633	Liquid	IOTest
APC-A700	0.5 mL	ASR	A86353	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89310	Liquid	IOTest

Clone: ALB2		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0471U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD11a

CD11a (α L integrin, LFA-1 α chain) is a member of the integrin family. Like some other leucocyte integrins (CD11b, CD11c, CD11d), CD11a is non-covalently associated with the β 2 integrin subunit CD18. CD11a is a transmembrane glycoprotein of 170 kDa, mainly expressed by leucocytes including monocytes, macrophages, neutrophils, eosinophils, basophils, B and T lymphocytes. Activated platelets also express CD11a and CD18. LFA-1 (CD11a/CD18) promotes homotypic adhesion between lymphoid cells and heterotypic adhesion of leucocytes to the vascular endothelium. LFA-1's known ligands are Intercellular Adhesion Molecules (ICAM): ICAM-1 (CD54), ICAM-2 (CD102) and ICAM-3 (CD50).

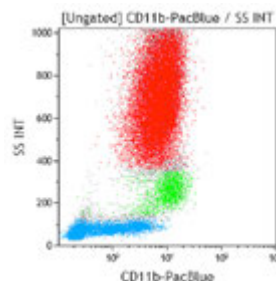


Lysed normal whole blood sample

Clone: 25.3			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0860U	Liquid	IOTest
PE	2 mL	ASR	IM1433U	Liquid	IOTest

CD11b

The CD11b antigen is also known as the integrin α M subunit. It combines with the CD18 antigen (integrin β 2 subunit) to build the integrin Mac-1 (CD11b/CD18, α M β 2, CR3, iC3bR, Mo-1). CD11b is a type I transmembrane glycoprotein of 170 or 165 kDa under reducing or non-reducing conditions, respectively. CD11b shows 19 potential N-glycosylation sites. Expression of the CD11b chain on the cell surface requires the presence of the CD18 antigen (also known as β 2 integrin chain). Together, these two subunits create the CD11b/CD18 integrin, one of the four integrin heterodimers that can be built by the association of CD18 β chain with four distinctive CD11 α chains. CD11b/CD18 is highly expressed on NK Cells, neutrophils, monocytes and macrophages.



Lysed normal whole blood sample.

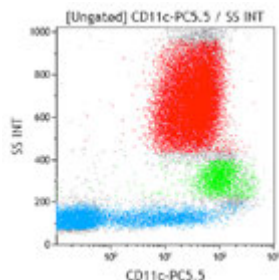
Clone: 94 (Mo1)			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
FITC	0.5 mg	ASR	6602573	Freeze-dried	COULTER CLONE

Clone: Bear1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0190	Freeze-dried	-
FITC	100 tests	CE	IM0530	Liquid	IOTest
FITC	2 mL	ASR	IM0530U	Liquid	IOTest
PE	2 mL	ASR	IM2581U	Liquid	IOTest
PC5	1 mL	ASR	IM3611	Liquid	IOTest
PC7	1 mL	ASR	A54822	Liquid	IOTest
APC	0.5 mL	ASR	A87782	Liquid	IOTest
APC-A750	0.5 mL	ASR	A97052	Liquid	IOTest
APC-A750	50 tests	CE	B36295	Liquid	IOTest
PB	0.5 mL	ASR	B16891	Liquid	IOTest
PB	50 tests	CE	B36296	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD11c

CD11c (integrin α X subunit, also known as leucocyte surface antigen p150, Axb2 and CR4) is a member of the integrin family. Like other leucocyte integrins (CD11a, CD11b, CD11d), CD11c is non-covalently associated with the β 2 integrin subunit (CD18). CD11c is a transmembrane glycoprotein of 145-150 kDa, mainly expressed by monocytes, macrophages and NK cells, and to a lesser extent by granulocytes, dendritic cells and some subsets of T and B cells.

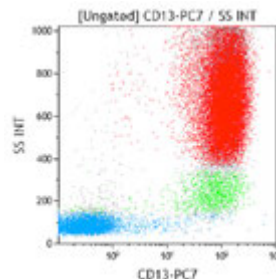


Lysed normal whole blood sample.

Clone: BU15			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0712	Freeze-dried	-
PE	100 tests	CE	IM1760	Liquid	IOTest
PE	2 mL	ASR	IM1760U	Liquid	IOTest
PC5	1 mL	ASR	IM3707	Liquid	IOTest
PC5.5	0.5 mL	ASR	B19719	Liquid	IOTest
PC7	1 mL	ASR	A80249	Liquid	IOTest
APC	0.5 mL	ASR	B01680	Liquid	IOTest
APC-A700	0.5 mL	ASR	B43304	Liquid	IOTest

CD13

The CD13 antigen is a transmembrane glycoprotein with a large extracellular region and a small intracellular NH₂-terminal tail. It has a molecular weight of 150 kDa and is expressed on the cell surface as a non-covalently linked homodimer. It is found on most cells of myeloid origin including neutrophils, eosinophils, basophils and monocytes from normal peripheral blood. It is absent from B and T lymphocytes as well as from red blood cells and platelets. This molecule is found on the surface of committed progenitor cells defined as the Granulocyte-Monocyte Colony Forming Units (CFU-GM) in normal bone marrow. There are up to five subpopulations of CD13 molecules possessing different levels of glycosylation, which may explain the different binding patterns of various CD13 antibodies.



Lysed normal whole blood sample.

Clone: 366 (MY7)			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.5 mg	ASR	6602626	Freeze-dried	COULTER CLONE
RD1	0.5 mL	ASR	6602989	Liquid	COULTER CLONE
PC7	0.5 mL	ASR	B19714	Liquid	IOTest

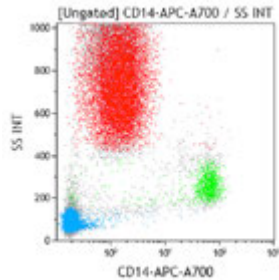
Clone: SJ1D1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0778U	Liquid	IOTest
PE	100 tests	CE	A07762	Liquid	IOTest
PE	2 mL	ASR	IM1427U	Liquid	IOTest
ECD	0.5 mL	ASR	B24026	Liquid	IOTest

Clone: Immu103.44			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
ECD	1 mL	ASR	A33097	Liquid	IOTest
ECD	100 tests	CE	B36286	Liquid	IOTest
PC5	100 tests	CE	A07763	Liquid	IOTest
PC5	1 mL	ASR	IM2639U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A79389	Liquid	IOTest
PC7	1 mL	ASR	A46528	Liquid	IOTest
APC	0.5 mL	ASR	A87783	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD14

The CD14 antigen is a glycosyl-phosphatidylinositol-linked single-chain surface membrane glycoprotein with a molecular weight of 53-55 kDa. It functions as a high affinity receptor for the complex of LipoPolySaccharide (LPS) and the LPS-Binding Protein (LBP). It is found on cells of myelomonocytic lineage. CD14 antigen is strongly expressed on monocytes, macrophages, and weakly on neutrophils. It is also weakly expressed on B lymphocytes, but is absent from T lymphocytes, NK cells, red blood cells and platelets. It is found on Langerhans cells, follicular dendritic cells and histiocytes.



Lysed normal whole blood sample.

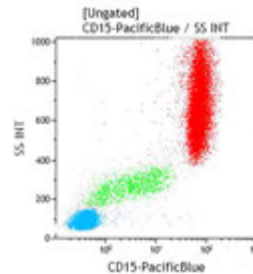
Clone: 116 (Mo2)		Isotype: IgM Mouse			
Form	Size	Status	Part#	Format	Line
FITC	100 tests	IVD	6602507	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6604114	Liquid	CYTO-STAT
RD1	100 tests	IVD	6603266	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6604500	Liquid	CYTO-STAT

Clone: 322A-1 (MY4)		Isotype: IgG2b Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.25 mg	ASR	A83482	Freeze-dried	COULTER CLONE
FITC	100 tests	IVD & CE	6603511	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6604110	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6603262	Liquid	COULTER CLONE

Clone: RMO52		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0643	Freeze-dried	-
FITC	2 mL	ASR	IM0645U	Liquid	IOTest
FITC	100 tests	CE	B36297	Liquid	IOTest
PE	100 tests	CE	A07764	Liquid	IOTest
PE	2 mL	ASR	IM0650U	Liquid	IOTest
ECD	1 mL	ASR	IM2707U	Liquid	IOTest
PC5	100 tests	CE	A07765	Liquid	IOTest
PC5	1 mL	ASR	IM2640U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A70204	Liquid	IOTest
PC7	1 mL	ASR	A22331	Liquid	IOTest
APC	100 tests	CE	IM2580	Liquid	IOTest
APC	1 mL	ASR	IM2580U	Liquid	IOTest
APC-A700	0.5 mL	ASR	A99020	Liquid	IOTest
APC-A750	0.5 mL	ASR	A86052	Liquid	IOTest
PB	0.5 mL	ASR	B00846	Liquid	IOTest
KrO	0.5 mL	ASR	B01175	Liquid	IOTest

CD15

The CD15 antigen (Lewis x or Le^x) is the lacto-N-(neo) fucopentaose III molecule. This carbohydrate epitope is carried by both glycolipids and glycoproteins expressed on the cell membrane. CD15 antigen is strongly expressed by neutrophils, eosinophils, monocytes, macrophages, mast cells and normal myeloid precursor cells. It is not expressed on normal erythrocytes, platelets or lymphocytes.



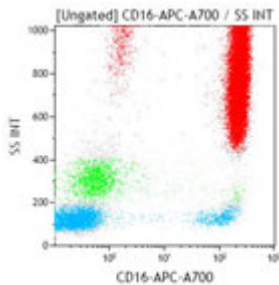
Lysed normal whole blood sample.

Clone: 80H5		Isotype: IgM Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1423U	Liquid	IOTest
FITC	100 tests	CE	B36298	Liquid	IOTest
PE	2 mL	ASR	IM1954U	Liquid	IOTest
PC5	1 mL	ASR	IM2641U	Liquid	IOTest
PB	0.5 mL	ASR	A74775	Liquid	IOTest
KrO	0.5 mL	ASR	B01176	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD16

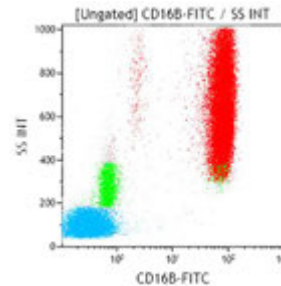
The CD16 antigen is the low-affinity receptor for IgG (FcγRIII). The CD16 antigen exists in two different forms encoded by two different genes: FcγRIIIA (or III-2) and FcγRIIIB (or III-1). The genetic heterogeneity of CD16 generates alternative membrane-anchored molecules. One is a transmembrane form (FcγRIIIA, 50-65 kDa) expressed on NK cells, monocytes and macrophages. The other is a glycosylphosphatidylinositol (GPI)-anchored form (FcγRIIIB, 48 kDa) only expressed on neutrophils. It has been shown that the CD16 antigen can be non-covalently associated within the membrane of NK cells, to a disulfide-linked homo or heterodimer made from the 16 kDa CD3ζ chain and the FcεRIγ chain.



Lysed normal whole blood sample.

CD16b

The IgGfc low affinity receptor (FcγRIII) is known to be expressed as an integral membrane protein (FcγRIIIA) and as a glycosylphosphatidylinositol (GPI)-anchored protein (FcγRIIIB). These two isoforms, encoded by two different, although linked genes, have extracellular amino-acidic sequences differing by six amino acids and show specific tissue distributions. FcγRIIIB protein defines the CD16b cluster.



Lysed normal whole blood sample

Clone: 1D3

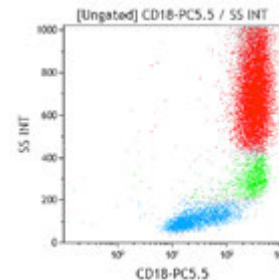
Isotype: IgM Mouse

The monoclonal antibody 1D3 was shown to be non-reactive with NK cells or monocytes but to be specific to polymorphonuclear leucocytes (PMNs). It recognizes an epitope specific to the FcγRIIIB molecule and was characterized as the sole antibody belonging to the CD16b cluster of differentiation. This antibody reacts with PMNs, irrespective of the neutrophil antigen (NA) phenotype, although it shows lower reactivity with NA2-homozygote PMNs as compared to NA1-homozygotes or NA1/NA2 heterozygotes.

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM2353U	Liquid	IOTest

CD18

CD18 is the 95 kDa integrin β2-chain which forms non-covalently-bound heterodimers with the integrin α subunits: CD11a, CD11b and CD11c (αL, αM and αX, respectively). CD18 is expressed by all leucocytes, activated platelets and megakaryocytic cell lines.



Lysed normal whole blood sample.

Clone: 7E4

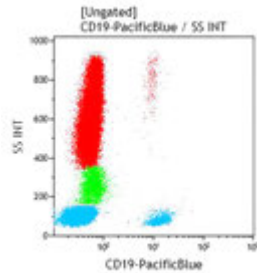
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1568U	Liquid	IOTest
PE	2 mL	ASR	IM1570U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B23135	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD19

The CD19 antigen (also called B4) is a type I membrane glycoprotein with a molecular weight of 95 kDa. CD19 is involved in the regulation of B lymphocyte development, activation and differentiation. This molecule is expressed on all normal B lymphocytes including pro-B lymphocytes, but is lost in maturation to plasma cells. It is also found on the surface of follicular dendritic cells, on the early cells of myelomonocytic lineage and on most stabilized B cell lines. It is not present on normal T lymphocytes, NK cells, monocytes, and granulocytes.



Lysed normal whole blood sample.

Clone: 89B (B4)			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	IVD & CE	6603012	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6603859	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6603024	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6603846	Liquid	CYTO-STAT

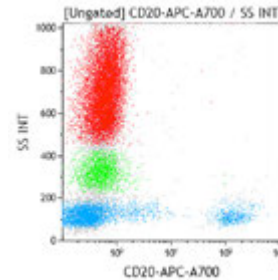
Clone: J3-119 Isotype: IgG1 Mouse
In vitro studies show that the CD19 antibodies have an inhibitory effect on the activation and proliferation of B lymphocytes. They also inhibit the B cell response after co-stimulation by anti-immunoglobulin and interleukin 4.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM1313	Freeze-dried	-
FITC	100 tests	CE	A07768	Liquid	IOTest
FITC	2 mL	ASR	IM1284U	Liquid	IOTest
PE	100 tests	CE	A07769	Liquid	IOTest
PE	2 mL	ASR	IM1285U	Liquid	IOTest
ECD	100 tests	CE	A07770	Liquid	IOTest
ECD	1 mL	ASR	IM2708U	Liquid	IOTest
PC5	100 tests	CE	A07771	Liquid	IOTest
PC5	1 mL	ASR	IM2643U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A66328	Liquid	IOTest
PC7	100 tests	CE	IM3628	Liquid	IOTest
PC7	1 mL	ASR	IM3628U	Liquid	IOTest
APC	100 tests	CE	IM2470	Liquid	IOTest
APC	1 mL	ASR	IM2470U	Liquid	IOTest
APC-A700	0.5 mL	ASR	A78837	Liquid	IOTest
APC-A750	0.5 mL	ASR	A78838	Liquid	IOTest
APC-A750	50 tests	CE	A94681	Liquid	IOTest
PB	0.5 mL	ASR	A86355	Liquid	IOTest
KrO	0.5 mL	ASR	A96418	Liquid	IOTest

Clone: HD237 (B4 lytic)			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
ECD	0.5 mL	ASR	6604551	Liquid	CYTO-STAT

CD20

The CD20 antigen (Bp35) is an integral non-glycosylated membrane protein with four transmembrane domains. Three isoforms (33, 35 and 37 kDa) result from differential phosphorylation within the cytoplasmic domain. The CD20 molecule is present on all normal B lymphocytes from peripheral blood, lymph node, spleen, tonsil and bone marrow but is absent from plasma cells. It is expressed naturally but at low density on a subset of peripheral blood T lymphocytes.



Lysed normal whole blood sample.

Clone: B9E9 (HRC20)			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07772	Liquid	IOTest
FITC	2 mL	ASR	IM1455U	Liquid	IOTest
PE	100 tests	CE	IM1451	Liquid	IOTest
PE	2 mL	ASR	IM1451U	Liquid	IOTest
ECD	1 mL	ASR	IM3607U	Liquid	IOTest
PC5	100 tests	CE	A07773	Liquid	IOTest
PC5	1 mL	ASR	IM2644U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B23134	Liquid	IOTest
PC7	100 tests	CE	IM3629	Liquid	IOTest
PC7	1 mL	ASR	IM3629U	Liquid	IOTest
APC	1 mL	ASR	A51076	Liquid	IOTest
APC	100 tests	CE	A21693	Liquid	IOTest
APC-A700	0.5 mL	ASR	B12112	Liquid	IOTest
APC-A750	0.5 mL	ASR	A66331	Liquid	IOTest
PB	0.5 mL	ASR	A74777	Liquid	IOTest

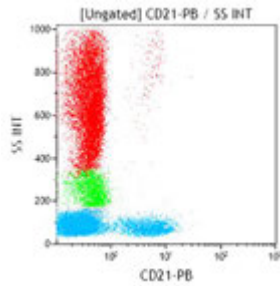
Clone: H299 (B1)			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.25 mg	ASR	A83477	Freeze-dried	COULTER CLONE
FITC	100 tests	IVD & CE	6602381	Freeze-dried	COULTER CLONE
FITC	50 tests	IVD & CE	6604106	Liquid	CYTO-STAT
RD1	100 tests	IVD & CE	6603446	Liquid	COULTER CLONE
RD1	50 tests	IVD & CE	6603858	Liquid	CYTO-STAT

Clone: FMC7			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07791	Liquid	IOTest
FITC		ASR	IM1364U	Liquid	IOTest
PB	0,5 mL	ASR	B08466	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD21

The CD21 antigen is a 145 kDa transmembrane glycoprotein. It belongs to the gene family of complement regulatory proteins. CD21 antigen (CR2) is the receptor for C3d and for Epstein-Barr virus (EBV). CD21 is present on mature B lymphocytes. It is absent from T lymphocytes, granulocytes and monocytes. This antigen is involved in B-lymphocyte activation and proliferation.

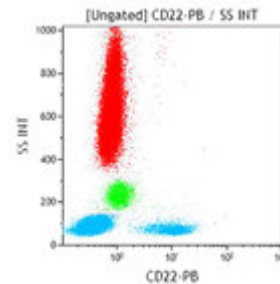


Lysed normal whole blood sample

Clone: B120 (B2)			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
RD1	100 tests	RUO	6603196	Liquid	COULTER CLONE
Clone: BL13			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0473U	Liquid	IOTest
PE	2 mL	ASR	A32536	Liquid	IOTest
PB	0.5 mL	ASR	B09982	Liquid	IOTest

CD22

The CD22 antigen (BL-CAM) is a transmembrane glycoprotein of the immunoglobulin superfamily. It may be expressed as two different isoforms: the α form (130 kDa) and the β form (140 kDa). CD22 antigen is a B cell restricted antigen expressed in the cytoplasm of B cell progenitors and on the surface of mature B lymphocytes. CD22 expression is lost after B-cell activation, prior to the plasma cell stage. It is absent from peripheral blood T lymphocytes, granulocytes, monocytes.



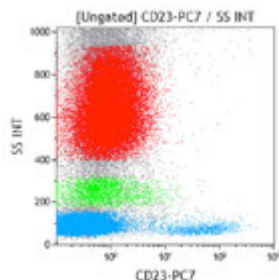
Lysed normal whole blood sample

Clone: HD239 (B3)			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
RD1	0.5 mL	ASR	6604428	Liquid	CYTO-STAT
Clone: SJ10.1H11			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0779U	Liquid	IOTest
PE	100 tests	CE	IM1835	Liquid	IOTest
PE	2 mL	ASR	IM1835U	Liquid	IOTest
ECD	0.5 mL	ASR	B10245	Liquid	IOTest
PC5	1 mL	ASR	IM3704	Liquid	IOTest
PC5.5	0.5 mL	ASR	A80712	Liquid	IOTest
PC7	1 mL	ASR	A74788	Liquid	IOTest
APC	0.5 mL	ASR	A60791	Liquid	IOTest
APC-A700	0.5 mL	ASR	A89311	Liquid	IOTest
APC-A700	50 tests	CE	B36293	Liquid	IOTest
PB	0.5 mL	ASR	B06498	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD23

The CD23 antigen (also called B6) is a 45 kDa transmembrane glycoprotein associated with MHC Class II antigen, which belongs to the C-type lectin family. CD23 is the low affinity receptor for IgE (FcεRII). CD23 antigen is expressed on B lymphocytes, monocytes and follicular dendritic cells (FDC). Expression of CD23 by B lymphocytes is up-regulated following mitogen or antigen activation. Soluble forms of CD23 are generated by proteolytic cleavage of the membrane molecule.

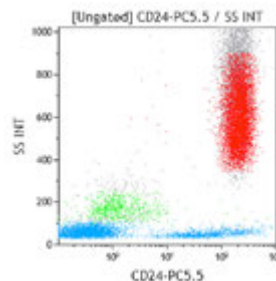


Lysed normal whole blood sample.

Clone: HD50 (B6)			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
FITC	0.5 mL	ASR	6604368	Liquid	COULTER CLONE
RD1	0.5 mL	ASR	6604426	Liquid	CYTO-STAT
Clone: 9P25			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	IM0529	Liquid	IOTest
FITC	2 mL	ASR	IM0529U	Liquid	IOTest
PE	2 mL	ASR	A33099	Liquid	IOTest
ECD	1 mL	ASR	IM3609U	Liquid	IOTest
PC7	0.5 mL	ASR	B12935	Liquid	IOTest
APC	1 mL	ASR	A69964	Liquid	IOTest
APC-A700	0.5 mL	ASR	A70207	Liquid	IOTest
PB	0.5 mL	ASR	A93689	Liquid	IOTest

CD24

The CD24 antigen is a glycosyl-phosphatidylinositol-linked membrane sialoglycoprotein, with a molecular weight of 35-45 kDa. CD24 is present on B cells, from the pre-B to the mature B cell stage, but not on plasma cells. It is expressed on mature granulocytes and on a variety of epithelial cell types.



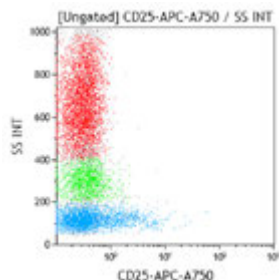
Lysed normal whole blood sample.

Clone: ALB9			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0118	Freeze-dried	-
PE	2 mL	ASR	IM1428U	Liquid	IOTest
ECD	0.5 mL	ASR	B12699	Liquid	IOTest
PC5	1 mL	ASR	IM2645	Liquid	IOTest
PC5.5	0.5 mL	ASR	B23133	Liquid	IOTest
APC	0.5 mL	ASR	A87785	Liquid	IOTest
APC-A750	0.5 mL	ASR	B10738	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD25

The CD25 antigen (IL-2R α chain, Tac or p55) is a single-chain glycoprotein with a molecular weight of 55 kDa which is the low affinity receptor for IL-2 (IL-2R α). In conjunction with CD122 (IL-2R β , p75) and CD132 (IL-2R γ , p64), CD25 antigen forms the high-affinity IL-2R complex. CD25 antigen is found on activated T and B cells, on activated monocytes and macrophages, and on T cell clones. It is also expressed on NK cells enriched from peripheral blood lymphocytes by culturing in the presence of IL-2. It is absent from thymocytes and resting T and B lymphocytes.



Lysed normal whole blood sample.

Clone: 1HT44H3 (IL-2R1) Isotype: IgG2a Mouse

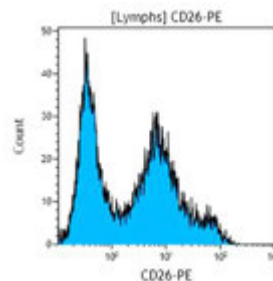
Form	Size	Status	Part#	Format	Line
FITC	0.25 mg	ASR	6603200	Freeze-dried	COULTER CLONE
RD1	0.5 mL	ASR	6604422	Liquid	CYTO-STAT

Clone: B1.49.9 Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0478U	Liquid	IOTest
PE	100 tests	CE	A07774	Liquid	IOTest
PE	2 mL	ASR	IM0479U	Liquid	IOTest
ECD	100 tests	RUO	6607112	Liquid	IOTest
PC5	100 tests	CE	IM2646	Liquid	IOTest
PC5	1 mL	ASR	IM2646U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A79386	Liquid	IOTest
PC7	1 mL	ASR	A52882	Liquid	IOTest
APC	0.5 mL	ASR	B09684	Liquid	IOTest
APC-A700	0.5 mL	ASR	A86356	Liquid	IOTest
APC-A750	0.5 mL	ASR	B13979	Liquid	IOTest
PB	0.5 mL	ASR	A82944	Liquid	IOTest

CD26

The CD26 antigen is a single-chain glycoprotein with a molecular weight of 110 kDa. It binds to adenosine deaminase (ADA) and is a functional collagen receptor. It is identical to dipeptidylpeptidase IV ectoenzyme (DPPIV). This antigen is expressed by activated T lymphocytes and B lymphocytes and by macrophages.



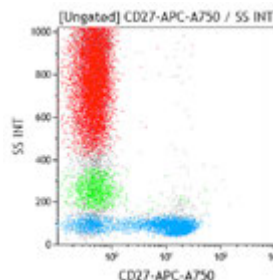
Lysed normal whole blood sample gated on lymphocytes.

Clone: 4EL-1C7 (Ta1) Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2724	Liquid	IOTest

CD27

The CD27 antigen is a transmembrane glycoprotein disulfide-linked homodimer composed of 55 kDa monomers. CD27 belongs to the Tumor Necrosis Factor Receptor (TNFR) gene family. CD27 antigen is found on medullary thymocytes, peripheral T lymphocytes, activated B lymphocytes and NK cells. It is preferentially expressed on the CD45RA⁺ CD45RO⁻, naïve subset of CD4⁺ T lymphocytes. Its ligand is CD70.



Lysed normal whole blood sample.

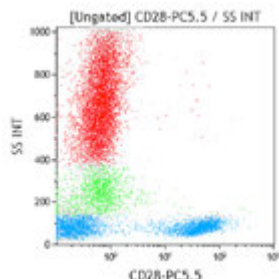
Clone: 1A4CD27 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM2034	Freeze-dried	-
PE	2 mL	ASR	IM2578	Liquid	IOTest
ECD	0.5 mL	ASR	B26603	Liquid	IOTest
PC5	100 tests	RUO	6607107	Liquid	IOTest
PC5.5	0.5 mL	ASR	B21444	Liquid	IOTest
PC7	1 mL	ASR	A54823	Liquid	IOTest
APC	0.5 mL	ASR	B09983	Liquid	IOTest
APC-A750	0.5 mL	ASR	B12701	Liquid	IOTest
PB	0.5 mL	ASR	B30635	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD28

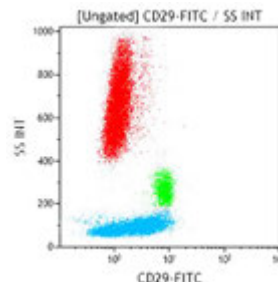
The CD28 antigen (Tp44) is a homodimer of disulfide-linked chains, with a molecular weight of 44 kDa each. CD28 antigen is expressed by a majority of CD3⁺ T lymphocytes. CD4⁺ T lymphocytes express the CD28 antigen more frequently than do CD8⁺ T lymphocytes. CD28 antigen is also present on plasma cells and thymocytes. This antigen is involved in the adhesion of T lymphocytes with B lymphocytes, through the B7/BB-1 (CD80) or B70/B7-2 (CD86) glycoproteins and provides a major co-stimulatory signal for T cell activation.



Lysed normal whole blood sample.

CD29

The CD29 antigen is the 130 kDa integrin $\beta 1$ chain which is expressed as a heterodimer, non-covalently associated with the integrin α subunits 1 to 6 (CD49a to CD49f) also known as Very Late Antigens (VLA). CD29 is also known as platelet GPIIb. The antigen mediates cellular adhesion and has broad cellular reactivity, but is not expressed by erythrocytes. In normal peripheral blood it is found on a subset of CD4⁺ and CD8⁺ T lymphocytes, on a minority of B lymphocytes and on monocytes. The "inducer" subpopulation of CD4⁺ lymphocytes co-expresses CD4 and CD29.



Lysed normal whole blood sample

Clone: CD28.2			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM1376	Freeze-dried	-
FITC	2 mL	ASR	IM1236U	Liquid	IOTest
PE	2 mL	ASR	IM2071U	Liquid	IOTest
ECD	100 tests	RUO	6607111	Liquid	IOTest
PC5	100 tests	RUO	6607108	Liquid	IOTest
PC5.5	0.5 mL	ASR	B24027	Liquid	IOTest
PC7	0.5 mL	ASR	B23313	Liquid	IOTest
APC	0.5 mL	ASR	B10244	Liquid	IOTest
APC-A700	0.5 mL	ASR	B12696	Liquid	IOTest
APC-A750	0.5 mL	ASR	B08757	Liquid	IOTest

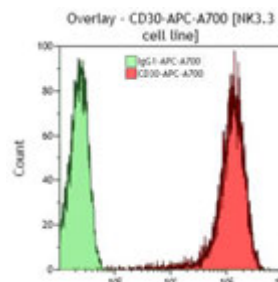
Clone: 4B4LDC9LDH8 (4B4)			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	100 tests	RUO	6603113	Freeze-dried	COULTER CLONE
FITC	100 tests	RUO	6603109	Freeze-dried	COULTER CLONE
FITC	50 tests	RUO	6604105	Liquid	CYTO-STAT
RD1	100 tests	RUO	6603177	Liquid	COULTER CLONE
RD1	50 tests	RUO	6604159	Liquid	CYTO-STAT

Clone: K20			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0791U	Liquid	IOTest

Clone: Lia1/2			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM1598	Freeze-dried	-

CD30

The CD30 antigen is a single-chain glycoprotein with a molecular weight of 105 kDa (Ki-1 antigen). It is a member of the TNFR (Tumor Necrosis Factor Receptor) superfamily and binds to CD153 (CD30 ligand). CD30 antigen is found on activated T and B lymphocytes and on Reed Sternberg cells.



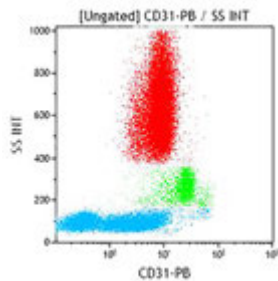
NK3.3 cell line.

Clone: HRS4			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2033U	Liquid	IOTest
APC	0.5 mL	ASR	A87939	Liquid	IOTest
APC-A700	0.5 mL	ASR	B42017	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD31

The CD31 antigen, also known as Platelet Endothelial Cell Adhesion Molecule 1 (PECAM-1), is a transmembrane glycoprotein of 130 kDa related to the immunoglobulin superfamily. Its expression has been shown on stem cells of the myeloid lineage, on platelets and on endothelial cell junctions. CD31 has been demonstrated to bind in a homophilic manner (CD31 binds CD31 on opposing cells). It also mediates heterophilic interactions, in particular, CD31 is involved in the migration of leucocytes through the endothelial cell wall, via adhesion to $\alpha\beta3$ integrin and to CD38. In addition, CD31 participates in outside-in signaling in leucocytes likely through phosphorylation of its intracytoplasmic tyrosine residues 663 and 686 and subsequent association with tyrosine phosphatases SHP-1 and SHP-2. Studies suggest a comparable mechanism of action for CD31 in activation and aggregation of platelets.

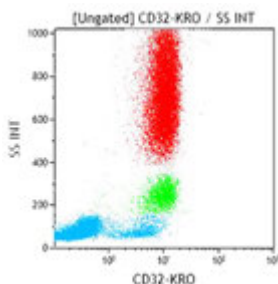


Lysed normal whole blood sample.

Clone: 1F11			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM2409	Liquid	IOTest
Clone: 5.6E			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1431U	Liquid	IOTest
PB	0.5 mL	ASR	B13035	Liquid	IOTest

CD32

FcγRII proteins exist as six potential isoforms encoded by three genes, designated as A, B, and C. The reported molecular weight of these isoforms are variable between 37 and 43 kDa. All isoforms are similar but not identical in their extracellular regions. The cytoplasmic portion of FcγRIIA and FcγRIIC contains an activatory ITAM motif whereas FcγRIIB contains an inhibitory ITIM motif. Differential splicing of FcγRIIB gene yields to 2 isoforms FcγRIIBb1 and FcγRIIBb2. Monocytes carry all forms of FcγRII, neutrophils carry FcγRIIA and C. FcγRIIB is expressed by B lymphocytes and mast cells.

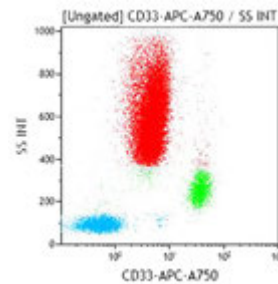


Lysed normal whole blood sample

Clone: 2E1			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0417	Freeze-dried	-
PE	2 mL	ASR	IM1935	Liquid	IOTest
KrO	0.5 mL	ASR	B01177	Liquid	IOTest

CD33

The CD33 antigen is a 67 kDa single-chain transmembrane glycoprotein reported to be a sialic acid dependent adhesion molecule. The extracellular portion of the molecule belongs to the Ig superfamily, involving one V-like and one C2-like domains. This antigen shows some homologies to myelin-associated glycoprotein and to the CD22 molecule. CD33 antigen is expressed on monocytes in peripheral blood. In the bone marrow, it is found on granulocyte and macrophage precursors, and is absent from pluripotent stem cells.



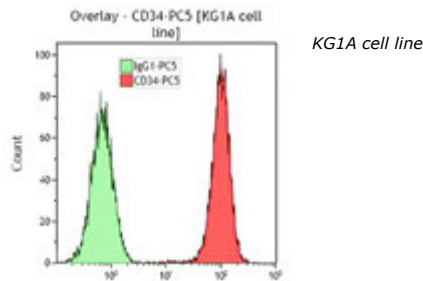
Lysed normal whole blood sample

Clone: 906 (MY9)			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.5 mg	ASR	6602689	Freeze-dried	COULTER CLONE
FITC	0.125 mg	ASR	6602985	Freeze-dried	COULTER CLONE
RD1	0.5 mL	ASR	6603042	Liquid	COULTER CLONE
RD1	0.5 mL	ASR	6604121	Liquid	CYTO-STAT
Clone: D3HL60.251			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1135U	Liquid	IOTest
PE	100 tests	CE	A07775	Liquid	IOTest
PE	2 mL	ASR	IM1179U	Liquid	IOTest
PC5	100 tests	CE	IM2647	Liquid	IOTest
PC5	1 mL	ASR	IM2647U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A70198	Liquid	IOTest
PC5.5	50 tests	CE	B36289	Liquid	IOTest
PC7	1 mL	ASR	A54824	Liquid	IOTest
APC	100 tests	CE	IM2471	Liquid	IOTest
APC	1 mL	ASR	IM2471U	Liquid	IOTest
APC-A750	0.5 mL	ASR	A70200	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD34

The CD34 antigen is a monomeric transmembrane phosphoglycoprotein of about 110 kDa with two distinct extracellular domains. The membrane proximal domain, of about 110 amino acids, probably adopts a globular conformation. The NH₂-terminal domain, of about 140 amino acids, is heavily glycosylated with both N-linked glycans and sialylated O-linked carbohydrates and probably exhibits an extended rod-like structure typical of mucin-like glycoproteins. The CD34 antigen is expressed on hematopoietic progenitor cells of all lineages as well as the most primitive pluripotent stem cells. CD34 antigen expression is highest on the most primitive stem cells and is gradually lost as lineage committed progenitors differentiate. The CD34 antigen is also present on capillary endothelial cells and on bone marrow stromal cells. Variations of glycosylation are thought to occur during normal hematopoiesis depending on lineage commitment and the level of cellular maturation.



Clone: Immu133 Isotype: IgG1 Mouse

Epitope Class I: Immu133 monoclonal antibody detects sialic acid-dependent class I epitope.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM1420	Liquid	IOTest
PC5	100 tests	RUO	IM2649	Liquid	IOTest

Clone: QBEnd10 Isotype: IgG1 Mouse

Epitope Class II: QBEnd10 reacts with early normal hematopoietic progenitor cells, and with vascular endothelial cells.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0786	Freeze-dried	-
PE	2 mL	ASR	IM1250U	Liquid	IOTest
PC5	1 mL	ASR	IM2650U	Liquid	IOTest

Clone: 581 Isotype: IgG1 Mouse

Epitope Class III: Clone 581 recognizes a sialidase / glycoprotease / chymopapain insensitive class III epitope.

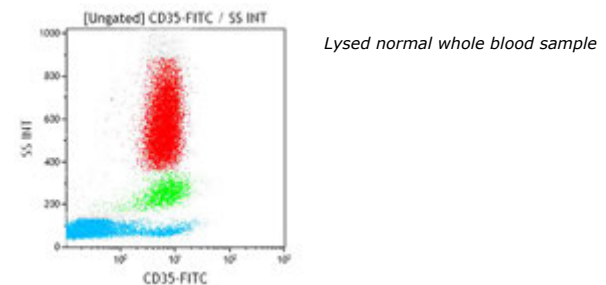
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	IM1870	Liquid	IOTest
FITC	2 mL	ASR	IM1870U	Liquid	IOTest
PE	100 tests	CE	A07776	Liquid	IOTest
PE	2 mL	ASR	IM1871U	Liquid	IOTest
ECD	1 mL	ASR	IM2709U	Liquid	IOTest
PC5	100 tests	CE	A07777	Liquid	IOTest
PC5	1 mL	ASR	IM2648U	Liquid	IOTest
PC7	1 mL	ASR	A51077	Liquid	IOTest
PC7	100 tests	CE	A21691	Liquid	IOTest
APC	100 tests	CE	IM2472	Liquid	IOTest
APC	1 mL	ASR	IM2472U	Liquid	IOTest
APC-A700	0.5 mL	ASR	A86354	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89309	Liquid	IOTest

Clone: QBEnd10 + Immu133 + Immu409 Isotype: IgG Mouse

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM1459U	Liquid	IOTest

CD35

The CD35 antigen is a polymorphic molecule. Different molecular weights: 160, 190, 220, 250 and 285 kDa were reported for the various allotypes. It is known as the Complement Receptor type I (CR1) with affinity for C3b, C4b and iC3b. The CD35 antigen is expressed by granulocytes (except basophils), B lymphocytes, monocytes, some NK cells and erythrocytes. The CD35 antigen mediates phagocytosis of complement coated particles.



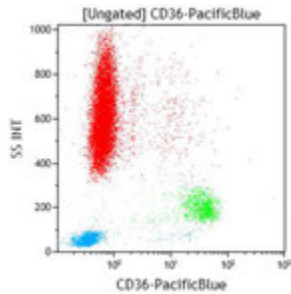
Clone: J3D3 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0195	Freeze-dried	-
FITC	100 tests	RUO	IM1836	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD36

The CD36 antigen (platelet GPIV) is a generic term for a family of glycoproteins with molecular weights ranging from 78 to 88 kDa. This molecule is found on platelets, endothelial cells, monocytes, and some human tumor cell lines. It is a very early marker of erythroid differentiation and mediates the adherence of platelets to thrombospondin and collagen.



Lysed normal whole blood sample.

Clone: FA6.152

Isotype: IgG1 Mouse

The FA6-152 monoclonal antibody, raised against fetal erythrocytes, recognizes the CD36 family of antigens on platelets and certain hematopoietic cells. It does not react with lymphocytes or granulocytes. It reacts with both fetal and adult monocytes, megakaryocytes, platelets, and with reticulocytes.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0765	Freeze-dried	-
FITC	2 mL	ASR	IM0766U	Liquid	IOTest
APC	0.5 mL	ASR	A87786	Liquid	IOTest
APC-A700	0.5 mL	ASR	B46022	Liquid	IOTest
PB	0.5 mL	ASR	B43302	Liquid	IOTest

CD37

The CD37 antigen is a 40-52 kDa single chain transmembrane protein with 4 transmembrane domains (Tetraspan/TM4SF). This molecule has both its NH₂- and COOH-termini inside the cells, and is heavily glycosylated on one extracellular loop. The main feature of this antigen is its high content of hydrophobic residues (45%). The CD37 antigen is strongly expressed on the surface of human peripheral blood B lymphocytes and on B lymphocytes from germinal centers. In the ontogeny of B cells, this antigen appears late, after the pre-B stage, and is not expressed on plasma cells. The CD37 antigen has a low expression on T lymphocytes, granulocytes, and monocytes. A weak reactivity is observed with other cellular types such as Langerhans cells, macrophages, normal medullar granulocytes and peripheral blood polymorphonuclear cells. CD37 is involved in signal transduction.

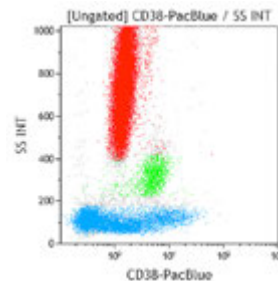
Clone: BL14

Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0457	Liquid	IOTest
PE	2 mL	ASR	IM0458	Liquid	IOTest

CD38

The CD38 antigen is a 45 kDa single chain type II integral membrane glycoprotein, with the NH₂-terminus inside the cytoplasm. CD38 is an enzyme with several activities such as NAD glycohydrolase, ADP ribosylcyclase and cyclic ADP ribose hydrolase. CD38 is expressed on activated T and B lymphocytes, NK cells, monocytes, plasma cells and medullary thymocytes. CD38 expression appears to depend on the differentiation and activation of the cell. In the B cell lineage, CD38 is expressed in early stages of B-cell ontogeny, lost during maturation and re-expressed upon terminal differentiation to plasma cells. Similarly, CD38 is expressed on thymocytes and at a high level on activated T cells. Most mature resting lymphocytes of both B and T lineages do not express the CD38 antigen. CD38 is widely used as a marker to study T and B lymphocyte activation.



Lysed normal whole blood sample.

Clone: T16

Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0366	Freeze-dried	-
FITC	100 tests	CE	A07778	Liquid	IOTest
FITC	2 mL	ASR	IM0775U	Liquid	IOTest
PE	2 mL	ASR	IM1832U	Liquid	IOTest

Clone: LS198-4-3

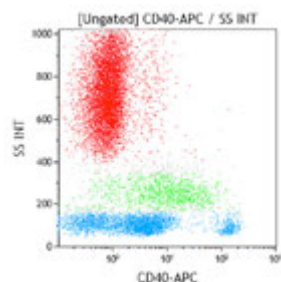
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	CE	A07779	Liquid	IOTest
PE	2 mL	ASR	IM2371U	Liquid	IOTest
RD1	0.5 mL	ASR	6604928	Liquid	CYTO-STAT
ECD	0.5 mL	ASR	A99022	Liquid	IOTest
PC5	100 tests	CE	A07780	Liquid	IOTest
PC5	1 mL	ASR	IM2651U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A70205	Liquid	IOTest
PC7	0.5 mL	ASR	A54189	Liquid	IOTest
APC	1 mL	ASR	A60792	Liquid	IOTest
APC-A700	0.5 mL	ASR	B23489	Liquid	IOTest
APC-A750	0.5 mL	ASR	A86049	Liquid	IOTest
PB	0.5 mL	ASR	B09683	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD40

The CD40 antigen is a glycosylated phosphoprotein. It is a member of the Tumor Necrosis Factor Receptor (TNFR) superfamily and contains four cysteine-rich repeats. Its molecular weight is about 44-48 kDa. CD40 antigen is present on all mature B lymphocytes, but not on plasma cells. It is strongly expressed by interdigitating cells, some epithelial cells, follicular dendritic cells, and fibroblasts and macrophages. CD40 binds to CD154 (CD40 ligand) on T cells, resulting in B cell growth and differentiation.

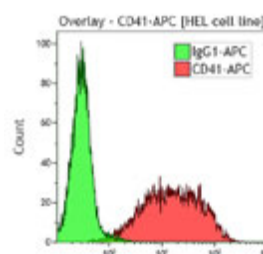


Lysed normal whole blood sample.

Clone: MAB89			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM1374	Freeze-dried	-
PE	2 mL	ASR	IM1936U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B20025	Liquid	IOTest
APC	0.5 mL	ASR	B30636	Liquid	IOTest

CD41

The CD41 antigen (platelet GPIIb; IIb integrin) is a transmembrane glycoprotein composed of two chains GPIIb α (120 kDa) and GPIIb β (23 kDa) linked by one disulfide bond. CD41 is always non-covalently associated with CD61 (platelet GPIIIa, β 3 integrin), to form the GPIIb-IIIa (CD41/CD61) complex. CD41 is expressed by platelets, megakaryocytes and a small subset of CD34⁺ cells, suggesting that CD41/CD61 is one of the earliest markers of the megakaryocytic lineage. The resting form of the CD41/CD61 complex binds to immobilized fibrinogen and upon platelet activation, the complex becomes a receptor for soluble fibrinogen, fibronectin, vWF, vitronectin and thrombospondin. It is involved in platelet aggregation.



HEL cell line

Clone: P2			Isotype: IgG1 Mouse		
The P2 antibody reacts with the α chain of CD41a (GPIIb α) in the intact complex with GPIIIa but not with the GPIIb or GPIIIa separately. This antibody blocks binding to fibrinogen and inhibits platelet aggregation induced by thrombin, collagen and ADP. The P2 antibody was used as a CD41 reference mAb during HLDA 6.					
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0145	Freeze-dried	-
FITC	2 mL	ASR	IM0649U	Liquid	IOTest
PE	100 tests	CE	A07781	Liquid	IOTest
PE	2 mL	ASR	IM1416U	Liquid	IOTest
ECD	100 tests	RUO	6607117	Liquid	IOTest
PC5	100 tests	RUO	6607116	Liquid	IOTest
PC7	100 tests	RUO	6607115	Liquid	IOTest
APC	0.5 mL	ASR	B16894	Liquid	IOTest

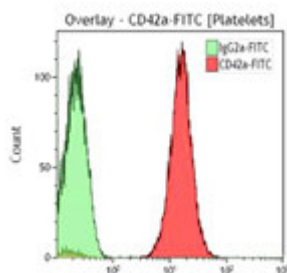
Clone: SZ22 **Isotype: IgG1 Mouse**
 The SZ22 monoclonal antibody reacts with the α chain of CD41 (GPIIb α) on platelets and megakaryocytes. This monoclonal does not inhibit platelet aggregation and secretion induced by collagen, arachidonic acid, and thrombin. It does not inhibit fibrinogen binding to human platelets induced by ADP, arachidonic acid and PAF.

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1756U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD42a

The CD42a antigen (GPIX) is a 22 kDa single-chain membrane glycoprotein that forms a noncovalent complex with CD42b, CD42c and CD42d (GP1X, GP1b, GPV). The CD42a-d complex is the receptor for von Willebrand's factor and is known as von Willebrand's factor-dependent adhesion receptor. The CD42a antigen is expressed on platelets and megakaryocytes.

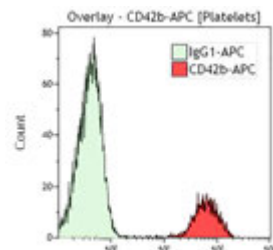


Platelet rich plasma from a normal whole blood sample.

Clone: SZ1			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0538	Freeze-dried	-
FITC	2 mL	ASR	IM1757U	Liquid	IOTest

CD42b

The CD42b antigen (GP1b α) is a membrane glycoprotein of 135 kDa, that forms a disulfide linked 160 kDa membrane protein with the CD42c (GP1b β) known as GP1b. GP1b forms a noncovalent complex with GPIX (CD42a) and GPV (CD42d). This antigen is found on platelets and megakaryocytes. It has also been reported on vascular and tonsillar endothelial cells. The CD42a-d complex is the receptor for von Willebrand's factor and is known as von Willebrand's factor-dependent adhesion receptor.

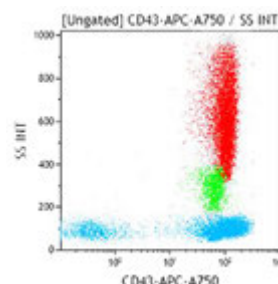


Platelet rich plasma (PRP) from a normal whole blood sample.

Clone: SZ2			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0409	Freeze-dried	-
FITC	2 mL	ASR	IM0648U	Liquid	IOTest
PE	2 mL	ASR	IM1417U	Liquid	IOTest
APC	0.5 mL	ASR	B13980	Liquid	IOTest

CD43

The CD43 antigen is a 95-135 kDa heavily O-glycosylated and sialylated single chain membrane glycoprotein. This cell surface mucin-type glycoprotein is also called leukosialin or sialophorin. CD43 antigen is expressed by platelets and by all leucocytes, weakly on resting B lymphocytes but highly after activation. A soluble form of CD43 (galactoglycoprotein) can be detected in plasma. This form is produced by proteolytic shedding of the extracellular portion of the membrane molecule after cell activation.

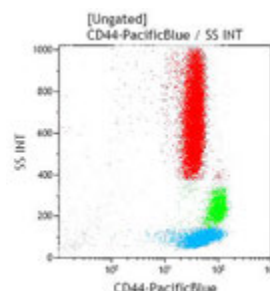


Lysed normal whole blood sample

Clone: DFT1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM3264U	Liquid	IOTest
PE	2 mL	ASR	A32560	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89307	Liquid	IOTest

CD44

The CD44 antigens are transmembrane glycoproteins and members of the hyaladherin family of hyaluronan-binding proteins. Multiple CD44 isoforms have been described, the predominant form being CD44S, a glycoprotein of 85 kDa. CD44 is present on most cells or tissues, but not on platelets, hepatocytes, cardiac muscle, kidney tubular epithelium, testis and skin portions. The human blood group antigens Ina/b reside on CD44.



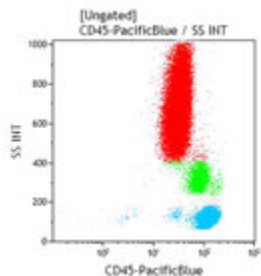
Lysed normal whole blood sample.

Clone: J.173			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0845	Freeze-dried	-
FITC	2 mL	ASR	IM1219U	Liquid	IOTest
PE	2 mL	ASR	A32537	Liquid	IOTest
APC-A750	0.5 mL	ASR	B30637	Liquid	IOTest
PB	0.5 mL	ASR	B37789	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD45

The CD45 molecules are single chain integral membrane proteins comprising at least five isoforms ranging from 180 to 220 kDa. They are generated by alternative splicing combinations of three exons (A, B, and C) of the genomic sequence. The non-restricted CD45, Leucocyte Common Antigen (LCA) consists of an extracellular sequence, proximal to the membrane, which is common to all CD45 isoforms. All the monoclonal antibodies that belong to the CD45 cluster react with this part of the antigen and are able to recognize all CD45 isoforms. These isoforms have extracytoplasmic sequences ranging from 391 to 552 amino acids long with numerous N-linked carbohydrate attachment sites. The cytoplasmic portion contains two phospho-tyrosine-phosphatase domains. The non-restricted CD45 epitope is present on the surface of all human leucocytes, lymphocytes, eosinophils monocytes, basophils and neutrophils by order of decreasing level of expression. CD45 is a major component of the lymphocyte membrane. It is absent from erythrocytes and platelets. It is lost during maturation of erythroid cells in the bone marrow. CD45 antibodies react with leucocyte progenitors in bone marrow.



Lysed normal whole blood sample.

Clone: J33			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
AF488	1 mL	ASR	A94245	Liquid	IOTest
FITC	100 tests	CE	A07782	Liquid	IOTest
FITC	2 mL	ASR	IM0782U	Liquid	IOTest
PE	100 tests	CE	A07783	Liquid	IOTest
PE	2 mL	ASR	IM2078U	Liquid	IOTest
ECD	100 tests	CE	A07784	Liquid	IOTest
ECD	1 mL	ASR	IM2710U	Liquid	IOTest
PC5	100 tests	CE	A07785	Liquid	IOTest
PC5	1 mL	ASR	IM2653U	Liquid	IOTest
PC5.5	100 tests	CE	A62835	Liquid	IOTest
PC5.5	1 mL	ASR	A54139	Liquid	IOTest
PC7	100 tests	CE	IM3548	Liquid	IOTest
PC7	1 mL	ASR	IM3548U	Liquid	IOTest
APC	100 tests	CE	IM2473	Liquid	IOTest
APC	1 mL	ASR	IM2473U	Liquid	IOTest
AF647	1 mL	ASR	A94246	Liquid	IOTest
APC-A700	1 mL	ASR	A71117	Liquid	IOTest
APC-A700	100 tests	CE	A79390	Liquid	IOTest
APC-A750	1 mL	ASR	A71119	Liquid	IOTest
APC-A750	100 tests	CE	A79392	Liquid	IOTest
PB	1 mL	ASR	A74765	Liquid	IOTest
PB	100 tests	CE	A74763	Liquid	IOTest
KrO	1 mL	ASR	A96416	Liquid	IOTest
KrO	100 tests	CE	B36294	Liquid	IOTest

Clone: KC56 (T-200)			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	1 mg	ASR	6603838	Freeze-dried	COULTER CLONE
FITC	0.5 mL	ASR	6604104	Liquid	CYTO-STAT
RD1	0.5 mL	ASR	6603839	Liquid	COULTER CLONE

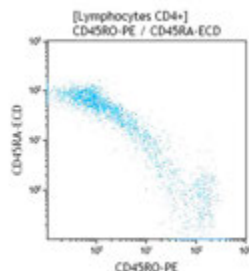
Clone: ALB12			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0647	Liquid	IOTest

Clone: Immu19.2			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM1833	Liquid	IOTest
PC5	1 mL	ASR	IM2652U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD45RA

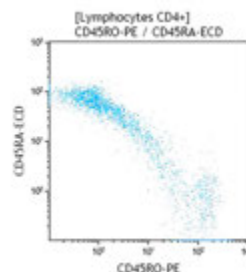
CD45RA epitopes are present on all the CD45 restricted molecules in which the exon A is expressed (ABC and AB containing isoforms). Most B lymphocytes express CD45RA isoforms. The differential expression of CD45 isoforms is associated with different functional properties of T lymphocytes. Peripheral T lymphocytes can be divided into two largely distinct populations of CD45RA⁺ CD45RO⁺ and CD45RA⁺ CD45RO⁻ cells. CD45RA is expressed by medullar thymocytes and naïve/resting peripheral CD4⁺ T lymphocytes.



Lysed normal whole blood sample gated on CD4 positive lymphocytes. CD45RA-ECD in dual staining with CD45RO-PE.

CD45RO

The CD45RO molecule is the 180 kDa isoform of CD45 Leucocyte Common Antigen (LCA). The expression of the CD45RA/CD45RO isoforms of CD45 is associated with functional differentiation of T lymphocytes. CD45RO is expressed by cortical thymocytes, CD4⁺ memory T lymphocyte subset and activated T lymphocytes. CD45RO is weakly expressed on monocytes and granulocytes.

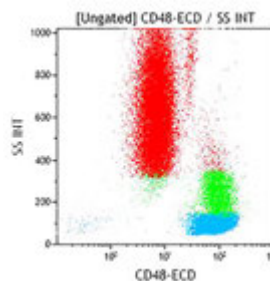


Lysed normal whole blood sample gated on CD4 positive lymphocytes. CD45RO-PE in dual staining with CD45RA-ECD.

Clone: UCHL1			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1247U	Liquid	IOTest
PE	100 tests	CE	A07787	Liquid	IOTest
PE	2 mL	ASR	IM1307U	Liquid	IOTest
ECD	1 mL	ASR	IM2712U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B30638	Liquid	IOTest
PC7	0.5 mL	ASR	B13648	Liquid	IOTest

CD48

The CD48 antigen is a glycosyl phosphatidylinositol- (GPI)-anchored membrane glycoprotein of 40-47 kDa with 2 extracellular immunoglobulin (Ig)-like domains. CD48 belongs to the Ig superfamily. CD48, expressed on all lymphocytes and monocytes, has been shown to be a low affinity ligand for CD2, suggesting a role in leucocyte adhesion. CD48 may participate in CD40-mediated activation of B cells.



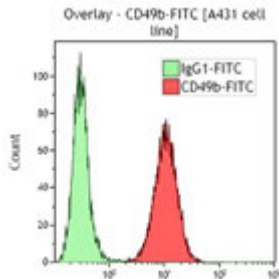
Lysed normal whole blood sample.

Clone: J4.57			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1837U	Liquid	IOTest
ECD	0.5 mL	ASR	B06026	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD49b

The CD49b antigen is a transmembrane glycoprotein of 150 kDa also known as the α -2 integrin and as platelet GPIa. CD49b non-covalently pairs with the β -1 integrin (CD29, GPIIa) to form the VLA-2 (very late activation antigen) complex. CD49b complexed to CD29 is involved in cell adhesion to collagen. It is expressed by platelets, activated T lymphocytes and thymocytes.



A431 cell line.

Clone: Gi9

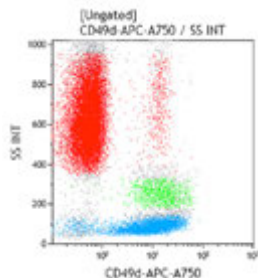
Isotype: IgG1 Mouse

The Gi9 antibody reacts with the molecule carrying the Br(a) as well as the Br(b) alloantigen. This antibody inhibits the adhesion of platelets to collagen. It detects human alloantibodies (anti-Br a,b) against VLA-2 by MAIPA assay. Gi9 was used as a CD49b reference monoclonal antibody during the HLDA 6.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0717	Freeze-dried	-
FITC	100 tests	RUO	IM1425	Liquid	IOTest

CD49d

CD49d is the integrin α 4 chain that non-covalently pairs with CD29 (β 1 chain) to form the very late activation antigen 4 (VLA-4), or with the integrin β 7 chain. CD49d is a transmembrane glycoprotein of 145 kDa devoid of disulfide bond. Complexed to β 1 or β 7 integrins, CD49d is not only involved in cell adhesion to fibronectin and vascular cell adhesion molecule 1 (VCAM-1), but also in intercellular leucocyte interactions. It is expressed by monocytes, lymphocytes, eosinophils, thymocytes and Langerhans cells.



Lysed normal whole blood sample.

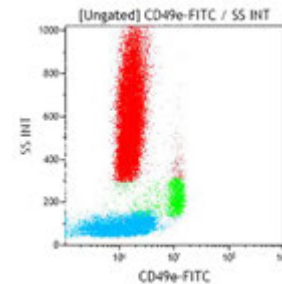
Clone: HP2/1

Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM0764	Freeze-dried	-
FITC	2 mL	ASR	IM1404U	Liquid	IOTest
APC	0.5 mL	ASR	B01682	Liquid	IOTest
APC-A750	0.5 mL	ASR	B16893	Liquid	IOTest

CD49e

The CD49e antigen is the 160 kDa integrin α 5-chain, which is composed of a heavy chain (135 kDa) and a light chain (25 kDa), linked by a disulfide bond. CD49e is non-covalently associated with the 130 kDa integrin β 1-chain (CD29 molecule), forming the VLA-5 complex. CD49e is expressed by monocytes, platelets and two myeloid cell lines (U937, K562). It is known as the fibronectin and invasin receptor. It is useful for basic studies of fibronectin-mediated adhesion.



Lysed normal whole blood sample.

Clone: SAM1

Isotype: IgG2b Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0771	Freeze-dried	-
FITC	2 mL	ASR	IM1854U	Liquid	IOTest

CD50

The CD50 antigen is a highly glycosylated type I membrane protein of 120-130 kDa. CD50 is expressed by leucocytes of all lineages, with or without activation, but not by platelets or erythrocytes. It is known as the Inter-Cellular Adhesion Molecule-3 (ICAM-3) and interacts with LFA-1 in cellular adhesion.

Clone: HP2/19

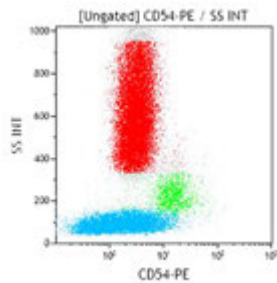
Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM1601	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD54

The CD54 antigen, previously known as ICAM-1 (InterCellular Adhesion Molecule-1), is a 90 kDa transmembrane glycoprotein. With seven potential N-linked glycosylation sites, its structure, as that of CD50 (ICAM-3) and CD102 (ICAM-2), is related to the Immunoglobulin family. The CD54 antigen mediates the adhesion of T lymphocytes with Antigen-Presenting Cells (APC) and is involved in T cell to T cell and T cell to B cell interactions. It is also involved in the adhesion of monocytes, lymphocytes and neutrophils to activated endothelium. It binds to the integrins LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). It is a receptor for the rhinovirus. It is expressed by endothelial cells and by many other cell types upon activation.

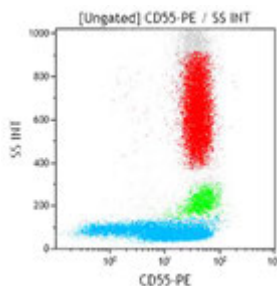


Lysed normal whole blood sample.

Clone: 84H10		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0726U	Liquid	IOTest
PE	2 mL	ASR	IM1239U	Liquid	IOTest

CD55

The CD55 antigen is a single chain glycosyl-phosphatidyl-inositol (GPI)-anchored, cell surface protein. This molecule undergoes post-transcriptional and post-translational modification resulting in a heterogeneous molecular weight ranging from 55 to 80 kDa. The CD55 antigen, also named Decay Accelerating Factor (DAF) is involved in the regulation of both alternative and classical complement pathways. C3b/C3Bb and C4b/C4b2a convertases, as well as echovirus, coxsackie B virus and CD97 are reported to interact with CD55. Like other GPI-anchored proteins, CD55 is associated in the cytoplasmic compartment with tyrosine kinases allowing signal transduction. The CD55 molecule is widely expressed on human cells including leucocytes, erythrocytes and platelets. CD55 is weakly expressed on NK cells.

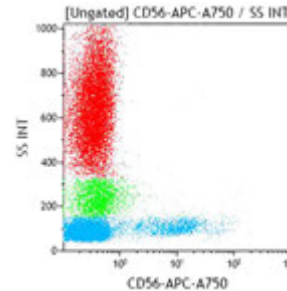


Lysed normal whole blood sample.

Clone: JS11KSC2.3		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM2725	Liquid	IOTest
PE	2 mL	ASR	IM2726	Liquid	IOTest

CD56

The CD56 antigen is a 140 kDa isoform of the Neural Cell Adhesion Molecule (N-CAM). Post-translational modifications to the polypeptide include N- and O- glycosylations, acylation, sulphation and phosphorylation. The different N-CAM isoforms have molecular weights ranging from 135 to 220 kDa. The CD56 antigen is moderately expressed on a subpopulation of peripheral blood large granular lymphocytes and on all cells with NK activity. It is also expressed by subsets of T lymphocytes. CD56 antibodies do not react with granulocytes, monocytes or B cells.



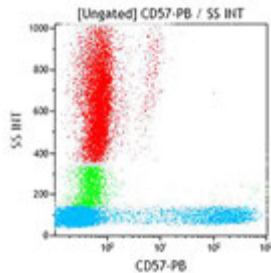
Lysed normal whole blood sample

Clone: N901 (NKH-1)		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.05 mg	ASR	6602705	Freeze-dried	COULTER CLONE
PE	100 tests	CE	A07788	Liquid	IOTest
PE	2 mL	ASR	IM2073U	Liquid	IOTest
RD1	0.5 mL	ASR	6603067	Liquid	COULTER CLONE
RD1	0.5 mL	ASR	6603857	Liquid	CYTO-STAT
ECD	1 mL	ASR	A82943	Liquid	IOTest
PC5	100 tests	CE	A07789	Liquid	IOTest
PC5	1 mL	ASR	IM2654U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A79388	Liquid	IOTest
PC7	1 mL	ASR	A51078	Liquid	IOTest
PC7	100 tests	CE	A21692	Liquid	IOTest
APC	100 tests	CE	IM2474	Liquid	IOTest
APC	1 mL	ASR	IM2474U	Liquid	IOTest
APC-A700	0.5 mL	ASR	B10822	Liquid	IOTest
APC-A750	0.5 mL	ASR	B46024	Liquid	IOTest
Clone: C218		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM1844	Freeze-dried	-

SINGLE-COLOR LIQUID REAGENTS

CD57

The CD57 antigen (HNK-1 antigen carbohydrate moiety) is an oligosaccharide with sulfated glucuronic acid residues that may be linked to a variety of polypeptides or lipids. In peripheral blood, it is found on a subset of cells with natural killer activity. It is confined to mononuclear cells, primarily large granular lymphocytes. Many of these CD57⁺ cells co-express the CD8 antigen and are a subset of the suppressor / cytotoxic T lymphocytes. Cord blood T cells or NK cells lack the CD57 antigen. It is not expressed on red blood cells or on platelets but is present on some neuroectodermal tissues.

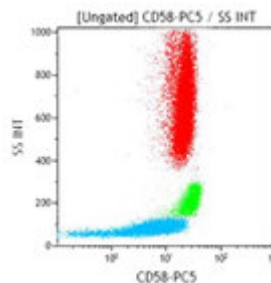


Lysed normal whole blood sample

Clone: NC1			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0466U	Liquid	IOTest
PB	0.5 mL	ASR	A74779	Liquid	IOTest

CD58

CD58 is a glycoprotein of 65-70 kDa, either transmembrane or glycosylphosphatidylinositol (GPI)-anchored. CD58 was first described as the lymphocyte-function associated antigen 3 (LFA-3). LFA-3 was further shown to interact with CD2 suggesting an important role in various immunological responses via T-cell adhesion and activation. CD58 mediates adhesion between killer and target cells, antigen presenting cells and T cells. This antigen is widely expressed on leucocytes, erythrocytes and endothelial cells.

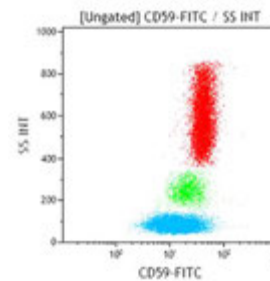


Lysed normal whole blood sample.

Clone: AICD58			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1218U	Liquid	IOTest
PE	2 mL	ASR	IM1430	Liquid	IOTest
PC5	1 mL	ASR	IM3702	Liquid	IOTest
APC	1 mL	ASR	IM3701	Liquid	IOTest

CD59

The CD59 antigen, also known as Protectin or Membrane Inhibitor of Reactive Lysis (MIRL) is a 18-20 kDa, single-chain, glycosylphosphatidylinositol (GPI)-anchored cell surface protein. CD59 inhibits complement lysis by binding to the C5b-8 and C5b-9 complexes and thus preventing formation of the polymeric C9 complex during the final steps of membrane attack complex (MAC). CD59 is expressed on all haematopoietic cells and is widely expressed on cells in all tissues. Studies of the susceptibility of HIV -1, HTLV-1 and HCMV to complement (C)-mediated lysis suggest that viruses incorporate host cell-derived C regulatory proteins such as CD59 and CD55, a mechanism by which a variety of enveloped viruses may acquire resistance to C-mediated lysis.

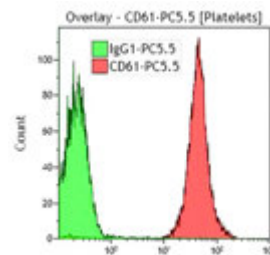


Lysed normal whole blood sample.

Clone: P282E			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM3457U	Liquid	IOTest

CD61

The CD61 antigen (platelet glycoprotein GPIIIa) is the 110 kDa integrin $\beta 3$ subunit, con-covalently associated with the integrin α IIb chain (CD41, platelet GPIIb) to form the GPIIb-IIIa complex (α IIb- $\beta 3$ integrin). Independently of CD41, CD61 is also associated with the integrin α V (CD51) to form the vitronectin receptor. CD41/CD61 is expressed only by platelets and megakaryocytes, whereas CD51/CD61 is found on osteoclasts, endothelial cells, macrophages, fibroblasts, smooth muscle, synovial lining cells and renal glomeruli.



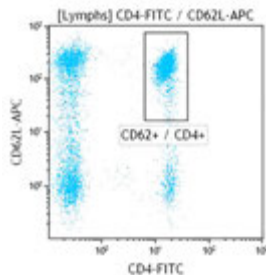
Platelet rich plasma (PRP) from a normal whole blood sample.

Clone: SZ21			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0540	Freeze-dried	-
FITC	100 tests	CE	IM1758	Liquid	IOTest
FITC	2 mL	ASR	IM1758U	Liquid	IOTest
PE	2 mL	ASR	IM3605	Liquid	IOTest
PC5.5	0.5 mL	ASR	B21172	Liquid	IOTest
PC7	1 mL	ASR	IM3716	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD62L

The CD62L antigen, also called LECAM-1, L-selectin or LAM-1, is a 75 kDa molecule. It acts as the peripheral lymph node homing receptor. It is also involved in lymphocyte binding to High Endothelial Venules (HEV) and in lymphocyte rolling on activated endothelium. CD62L is expressed by B and T lymphocytes, monocytes, neutrophils, eosinophils, and approximately half of the peripheral NK lymphocytes.

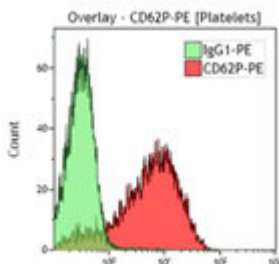


Lysed normal whole blood sample.
Gated on lymphocytes.

Clone: DREG56			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1231U	Liquid	IOTest
PE	2 mL	ASR	IM2214U	Liquid	IOTest
ECD	1 mL	ASR	IM2713U	Liquid	IOTest
PC5	1 mL	ASR	IM2655U	Liquid	IOTest
PC7	0.5 mL	ASR	B30641	Liquid	IOTest
APC	0.5 mL	ASR	B30639	Liquid	IOTest
APC-A750	0.5 mL	ASR	B26604	Liquid	IOTest
PB	0.5 mL	ASR	B30640	Liquid	IOTest

CD62P

The CD62P antigen (P-selectin/GMP-140/PADGEM) is a member of the selectin family. Like other selectins (CD62E and CD62L), CD62P contains an amino terminal lectin-like domain, followed by an EGF domain, nine short consensus repeats (SCR), a transmembrane domain and a short cytoplasmic domain. CD62P (140 kDa) is present in megakaryocytes, in Weibel-Palade bodies of endothelial cells and in α -granules of platelets. CD62P is translocated to the surface membrane upon in vitro and in vivo activation. CD62P is involved in the interaction between activated platelets and with monocytes and neutrophils.

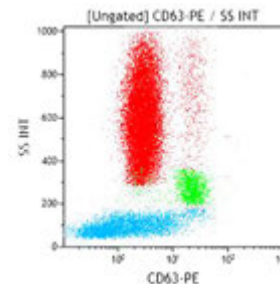


Platelet rich plasma (PRP) from a
normal whole blood sample.

Clone: CLBThromb/6			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07790	Liquid	IOTest
PE	2 mL	ASR	IM1759U	Liquid	IOTest

CD63

The CD63 antigen, also known as lysosomal membrane associated glycoprotein 3 (LAMP3), is a member of the tetraspanin (TM4SF) family. Nearly 20 genes encode tetraspanins whose main structural characteristics is their four transmembrane domains. CD63, as other tetraspanins (CD9, CD81, CD82), has recently been reported as forming complexes with VLA-3 and phosphatidylinositol 4-kinase, with VLA-6, CD11/CD18 and tyrosine kinase. CD63 was first described in granules of resting platelets and on the surface membrane on activated platelets. CD63 was later identified as granulophysin, a platelet dense granule glycoprotein. The molecular weight of the platelet form of CD63 ranges from 40 to 55 kDa. CD63 has been found to be identical to the ME491 antigen expressed by melanoma cells. It is also found on monocytes / macrophages and is weakly expressed by resting granulocytes, T lymphocytes and B lymphocytes. CD63 antigen, present in azurophilic granules of non-stimulated neutrophils, is strongly expressed on the surface of neutrophils after activation. Studies have shown that CD63 may be a marker for granule release. This phenomenon is also reported for basophils.



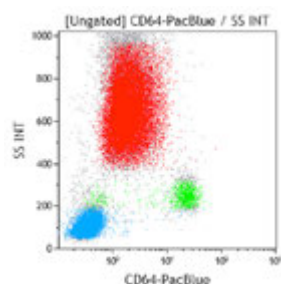
Lysed normal whole blood sample.

Clone: CLBGran/12			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1165U	Liquid	IOTest
PE	2 mL	ASR	IM1914U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD64

The CD64 antigen (FcγRI) is a glycoprotein with a molecular weight of 72 kDa. It belongs to the Ig superfamily, consisting of three C2-like Ig domains. It is the high affinity receptor for IgG and is able to bind monomeric human IgG1 and IgG3. This antigen is expressed on macrophages and monocytes. It is also expressed on neutrophils when induced with interferon γ (IFN-γ) and granulocyte colony-stimulating factor (G-CSF).

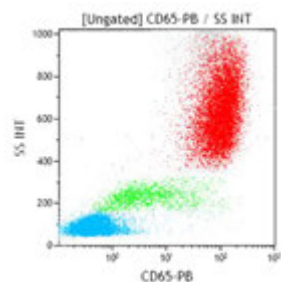


Lysed normal whole blood sample.

Clone: 22			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1604U	Liquid	IOTest
PE	2 mL	ASR	IM3601U	Liquid	IOTest
ECD	0.5 mL	ASR	A98434	Liquid	IOTest
PC5	1 mL	ASR	IM3606U	Liquid	IOTest
PC7	0.5 mL	ASR	B06025	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89308	Liquid	IOTest
PB	0.5 mL	ASR	B19718	Liquid	IOTest

CD65

The CD65 antigen is analogous to the carbohydrate structure(s) recognized by CD15 antibodies. It is a type II chain fucoganglioside involving the oligosaccharide sequence : Galβ1 - 4GlcNacβ1 - 3Galβ1 - 4GlcNac(Fucα1-3)β1 - R. Granulocytes are CD65 positive and monocytes are weakly positive. It does not react with T and B lymphocytes.

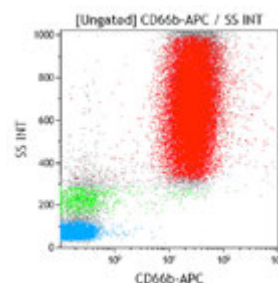


Lysed normal whole blood sample.

Clone: 88H7			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1654U	Liquid	IOTest
FITC	100 tests	CE	B36299	Liquid	IOTest
PB	0.5 mL	ASR	B08164	Liquid	IOTest

CD66b

The CD66 antigens were originally described as granulocyte-specific activation antigens, related to the carcino-embryonic antigen (CEA) previously described on colon cancer cells. The CEA/CD66 gene group belongs to the immunoglobulin (Ig) gene superfamily. Among the CD66 cluster, CD66b (also known as CGM6) is a glycosyl-phosphatidylinositol (GPI)-anchored glycoprotein of 95-100 kDa. CD66b is thought to play a role in the regulation of the adhesive activity of CD11/CD18 via signal transduction in neutrophils. It is strongly expressed by myelocytes, metamyelocytes, neutrophils and polymorphonuclear neutrophils. CD66b is weakly expressed by promyelocytes.



Lysed normal whole blood sample.

Clone: 80H3			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0531U	Liquid	IOTest
APC	0.5 mL	ASR	B15091	Liquid	IOTest
APC-A750	0.5 mL	ASR	B08756	Liquid	IOTest

CD66c (KOR-SA3544)

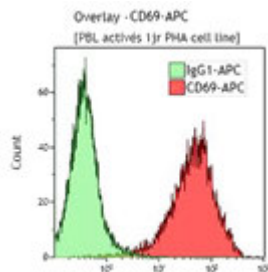
The CD66c (also called KOR-SA-3544) antigen is a granulocyte cell surface protein of 80-100 kDa.

Clone: KOR-SA3544			Isotype: IgG1 Mouse		
In peripheral blood, the KOR-SA3544 antibody reacts with the majority of granulocytes but not with lymphocytes, monocytes, platelets or red blood cells. In normal bone marrow, only the myeloid cells are positive.					
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM2039U	Liquid	-
PE	1 mL	ASR	IM2357U	Liquid	-

SINGLE-COLOR LIQUID REAGENTS

CD69

The CD69 antigen is a 60 kDa disulfide-linked dimeric structure, known as activation inducer molecule (AIM). This structure contains two differentially glycosylated forms (33 and 27 kDa) of a single core protein, that are covalently associated. This activation antigen is one of the earliest appearing cell surface glycoproteins (before other activation antigens such as IL2-R) after T or B-lymphocyte activation but is absent in resting lymphocytes. It is also expressed by activated macrophages, NK cells and other cell types including neutrophils, eosinophils and platelets. Its expression in vitro can be induced by different factors such as PMA, PHA or CD3 monoclonal antibodies.



PHA cell line.

Clone: TP1.55.3

Isotype: IgG2b Mouse

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM1943U	Liquid	IOTest
ECD	100 tests	RUO	6607110	Liquid	IOTest
PC5	100 tests	CE	IM2656	Liquid	IOTest
PC5	1 mL	ASR	IM2656U	Liquid	IOTest
PC7	1 mL	ASR	A80710	Liquid	IOTest
APC	1 mL	ASR	A80711	Liquid	IOTest

CD71

The CD71 antigen is known as the transferrin receptor. It mediates cellular iron uptake via internalization and recycling. It is a type II membrane glycoprotein, characterized as a disulfide-bound dimer of two identical subunits of 95 kDa each. CD71 is expressed on activated T and B lymphocytes, macrophages and erythroblasts. The N-Terminal, intracytoplasmic domain of CD71 mediates rapid endocytosis and self recycling. CD71 is absent from resting blood leucocytes. Its expression is upregulated on proliferating cells.

Clone: YDJ1.2.2

Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	IM0483	Liquid	IOTest
FITC	2 mL	ASR	IM0483U	Liquid	IOTest
PE	2 mL	ASR	IM2001U	Liquid	IOTest
APC-A700	0.5 mL	ASR	A97051	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89313	Liquid	IOTest

CD77

The CD77 antigen is neutral glycosphingolipid of the globoseries globotriaosylceramide (Gb3). It is known as the Pk blood group antigen, a normal intermediate in the biosynthetic pathway of the P blood group antigen. CD77 is also present as an antigen of germinal center B lymphocytes entering apoptosis. It is expressed by endothelial cells. Studies have shown that the antigen may be associated with a Burkitt's Lymphoma-associated Antigen (BLA).

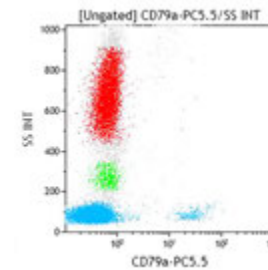
Clone: 38.13

Isotype: IgM Rat

Form	Size	Status	Part#	Format	Line
UNLB	100 tests	RUO	IM0175	Liquid	-

CD79a

The CD79a molecule (MB-1, Igα) is part of the MB-1/B29 (CD79a/CD79b) disulfide-linked heterodimer which is non-covalently associated with membrane immunoglobulins (Igs) to build the B Cell antigen Receptor (BCR) complex. CD79a is a 40-45 kDa glycoprotein and belongs to the Ig superfamily of surface antigens. CD79a protein is specifically and strictly expressed throughout B lymphocyte differentiation. It appears early in ontogeny, probably before expression of cytoplasmic μ-chain, and is present in the cytoplasm of plasma cells.



Permeabilized normal whole blood sample.

Clone: HM47

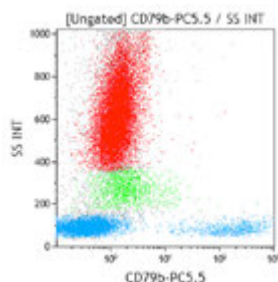
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	CE	IM2221	Liquid	IOTest
PE	2 mL	ASR	IM2221U	Liquid	IOTest
PC5	1 mL	ASR	IM3456U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B42018	Liquid	IOTest
APC	1 mL	ASR	A60793	Liquid	IOTest
APC	100 tests	CE	B36287	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD79b

The CD79b molecule (B29, Ig β) is part of the MB-1/B29 disulphide-linked heterodimer which is non-covalently associated with membrane-Igs to build the B Cell antigen Receptor (BCR) complex. CD79b is a 33-40 kDa glycoprotein and belongs to the Ig superfamily. The BCR complex is restricted to B cell lineage, expressed on the surface just after the pre-B cell stage and is lost prior to the plasma cell stage.



Lysed normal whole blood sample.

Clone: CB3-1

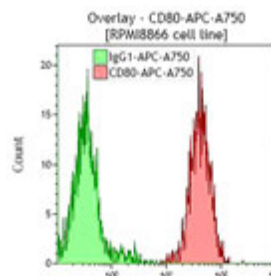
Isotype: IgG1 Mouse

The CB3-1 antibody reacts with the external part of the CD79b molecule and is to be used in flow cytometry. This antibody is not suitable for intracytoplasmic staining. For this application the use of the CD79a antibody is recommended.

Form	Size	Status	Part#	Format	Line
PE	100 tests	CE	IM1612	Liquid	IOTest
PE	2 mL	ASR	IM1612U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B21445	Liquid	IOTest
APC	0.5 mL	ASR	A87784	Liquid	IOTest

CD80

The CD80 antigen (B7, BB1) is a highly glycosylated single-chain protein. Its extracellular domain consists of two Ig-like domains. This 60 kDa molecule shares with CD86 the capability to be the ligand for two structurally similar molecules expressed on T lymphocytes, CD28 and CD152 (CTLA-4). CD80 antigen is expressed on in vitro activated B lymphocytes after 24h stimulation and at maximal level 48-72h post activation. It is not expressed on the majority of resting B cells from peripheral blood but identifies a subpopulation of B cells that has been previously activated. The antigen is also expressed by HTLV-1 transformed T cells and activated monocytes. CD80 binding provides co-stimulatory signals for T cell activation.



RPM18866 cell line

Clone: MAB104

Isotype: IgG1 Mouse

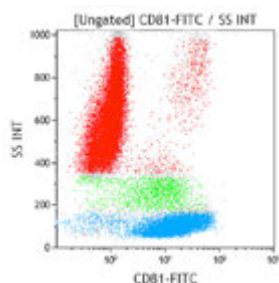
The MAB104 monoclonal antibody reacts with in vitro activated B lymphocytes, some B cell lines, and weakly with a small proportion of non-activated B cells. This antibody also reacts with activated T cells but not with peripheral monocytes and T cells.

Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1853U	Liquid	IOTest
PE	2 mL	ASR	IM1976U	Liquid	IOTest
PC7	0.5 mL	ASR	B30644	Liquid	IOTest
APC	0.5 mL	ASR	B30642	Liquid	IOTest
APC-A750	0.5 mL	ASR	B30643	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD81

The CD81 molecule is a single chain, 4 transmembrane domain protein (Tetraspan/TM4SF). Both the NH₂- and COOH-termini are located inside the cytoplasm, and two loops of the protein sequence are exposed extracellularly. The CD81 antigen is not glycosylated and its molecular weight is 26 kDa. Its tissue distribution is broad. This antigen may be present in some cases as multimolecular complexes, in association with other members of the TM4 superfamily (CD37, CD53) or, on the surface of B cells, in association with CD19 and/or CD21 and/or MHC class II antigens. Most B lymphocytes, at all stages of cellular differentiation, express CD81 at relatively high levels.

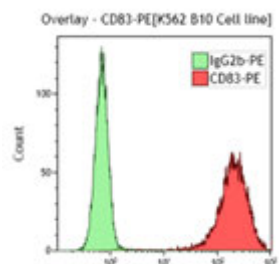


Lysed normal whole blood sample.

Clone: JS64			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B25329	Liquid	IOTest
PE	2 mL	ASR	IM2579	Liquid	IOTest
APC	0.5 mL	ASR	A87789	Liquid	IOTest
PB	0.5 mL	ASR	B19717	Liquid	IOTest

CD83

CD83, or HB15 molecule, is a 43 kDa glycoprotein member of the immunoglobulin superfamily. It is composed of a single extracellular V-type Ig-like domain, a transmembrane region and a 40 amino acid cytoplasmic domain. CD83 is predominantly expressed by dendritic lineage cells including Langerhans cells, skin and peripheral blood dendritic cells. It is also expressed by interdigitating reticulum cells present in the T cell zones of lymphoid organs as well as being weakly expressed by some germinal center lymphocytes. CD83 is expressed by *in vitro* generated dendritic cells. It is not expressed by resting peripheral blood leucocytes at detectable levels and is only expressed at low levels following lymphocyte activation *in vitro*.

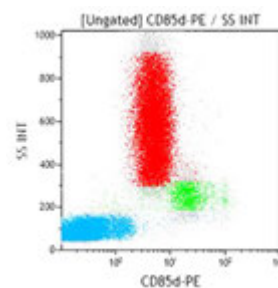


K562 B10 Cell line.

Clone: HB15a			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM2410U	Liquid	IOTest
PE	2 mL	ASR	IM2218U	Liquid	IOTest
PC5	1 mL	ASR	IM3240U	Liquid	IOTest

CD85d (ILT4)

CD85d (ILT4) is a member of the new immunoglobulin (Ig)-like transcripts (ILT) family of genes located on human chromosome 19q13.4. ILT4 is also known as leucocyte Ig-like receptor (LIR)-2 and monocyte / macrophage Ig-like receptors (MIR)-10. ILT4 is a transmembrane protein recognized by 42D1 monoclonal antibody. The protein has extracellular Ig-SF domains, and ITIM motifs in the cytoplasmic tail that inhibit cellular responses by recruiting phosphatases such as SHP-1. ILT4 is confined to the myelomonocytic lineage as it is expressed on monocytes, macrophages, and dendritic cells (DCs). ILT4 binds to HLA-G molecules with a 3- to 4-fold higher affinity than to classical MHC class I molecules. ILT4 may modulate one or several of the antigen presenting functions mediated by DCs, control inflammatory responses mediated by monocytes / macrophages or inhibit their cytotoxicity. The recognition of HLA-G by ILT4 may play a role in materno-fetal tolerance as HLA-G is selectively expressed in the trophoblast. It has been shown that recipient's CD8⁺CD28⁻ T suppressor (Ts) cells may induce tolerance by up-regulating IRL3 and ILT4 expressions in donor's dendritic cells, rendering these antigen-presenting cells (APCs) tolerogenic.



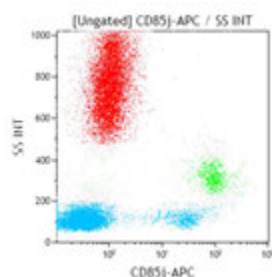
Lysed normal whole blood sample.

Clone: 42D1			Isotype: IgG2a Rat		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A22334	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD85j (ILT2)

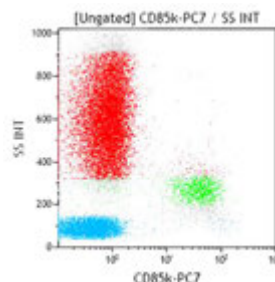
CD85j, also called ILT2, is a member of the immunoglobulin (Ig)-like transcripts (ILT) family of genes located on human chromosome 19 (the numerical subclassification refers to the members in the order of the gene on the chromosome). It is a 110-kDa transmembrane glycoprotein. ILT2 receptor is a NK receptor involved in inhibition of NK and T cells cytolytic activity and cytokine production. ILT2 is also known as leucocyte Ig-like receptor (LIR)-1 and monocyte / macrophage Ig-like receptor (MIR)-7. The protein has 4 extracellular Ig-SF domains, and 4 cytoplasmic ITIM motifs in the cytoplasmic tail. Both myeloid and lymphoid cells express ILT2. Among lymphoid cells, NK cells, T cell subsets and all peripheral B cells express ILT2. It is also expressed on monocytes, macrophages, and dendritic cells. Ligands for CD85j are non-classical class I HLA-G molecules, certain alleles of HLA-A and -B loci and the human cytomegalovirus gene product, UL18, a viral homolog of HLA class I molecules. The inhibitory function of CD85j has been explored mainly in NK and T cells. In NK cells, ILT2 inhibits the cytotoxicity of HLA-Class I-positive target cells. In T cells, ILT2 inhibits both signaling and cellular events that control the activation of T cells.



Lysed normal whole blood sample.

CD85k (ILT3)

CD85k, also called ILT3, is a member of a family of genes located on human chromosome 19: Immunoglobulin (Ig)-like Transcripts (ILT), also known as Leucocyte Ig-like Receptors (LIRs) and Monocyte/Macrophage Ig-like Receptors (MIRs). In contrast to Killer cell Ig-like Receptors (KIR), ILT/LIR/MIR are preferentially expressed on monocytes, macrophages, dendritic cells and granulocytes, except ILT2 (CD85j), which is expressed by both myeloid and lymphoid cells: NK, T cell subsets and all peripheral B cells. All ILT receptors but one (ILT6) are transmembrane proteins, with 2 or 4 extracellular Ig-SF (Immunoglobulin Super Family) domains. ILT3 (also known as LIR5, HM18) is a transmembrane protein of 60 kDa, with 2 extracellular Ig-SF domains, and 3 cytoplasmic Immunoreceptor Tyrosine-based Inhibitory Motifs (ITIMs). The CD85k molecule is constitutively phosphorylated. It is selectively expressed by monocytes, macrophages and dendritic cells (DCs). The ligand of ILT3 is unknown, however ILT3 seems to be involved in one of the inhibitory mechanisms, ranging from temporary to permanent inactivation, that control homeostasis and immunological tolerance.



Lysed normal whole blood sample.

Clone: HP-F1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	A07408	Liquid	IOTest
APC	1 mL	ASR	B30645	Liquid	IOTest

Clone: ZM3.8 Isotype: IgG1 Mouse

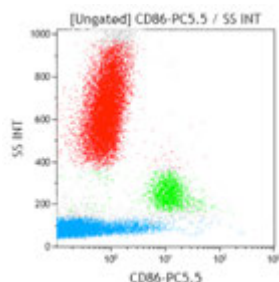
The ZM3.8 antibody immunoprecipitates a protein of 55 kDa from ILT3-transfected T cells and a protein of 60 kDa from monocytes. ILT3 is found on peripheral blood mononuclear cells. It is positive only on CD14⁺ monocytes, dendritic cells, CD83⁺ and CD14⁺ HLA-DR⁺ cells (peripheral blood DC precursors). ILT3 is negative on CD3⁺ T cells, CD16⁺ NK cells, CD20⁺ B cells, neutrophils and monocyte-enriched populations. It is positive on DCs derived from monocytes cultured with GM-CSF+IL-4 and on macrophages derived from monocytes cultured with M-CSF. On myelo-monocytic cell lines, it is positive on THP1, negative on U937, Monomac6 and HL-60. On EBV-B cell lines, positive only on C1R. CD85k is negative on purified fresh B cells, resting or activated with CD40L in the presence of IL-2, 4 and 10.

Form	Size	Status	Part#	Format	Line
PC5	1 mL	ASR	IM3579	Liquid	IOTest
PC7	1 mL	ASR	A46529	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD86

The CD86 antigen (B7-2, B70) is a single-chain trans-membrane glycoprotein, structurally similar to CD80. Its molecular weight is 80 kDa, under reducing conditions. The extracellular region is composed of one V-type and one C-type Ig-like domains. There are 8 potential sites for N-glycosylation. The cytoplasmic tail has 3 potential sites for protein kinase C phosphorylation. CD86 shares with the CD80 molecule the same co-receptors on T cells, CD28 and CD152 (CTLA-4). CD86 binds to CD152 with a 20-100-fold higher affinity than to CD28. CD86 is expressed constitutively by interdigitating dendritic cells, and at lower level by peripheral blood dendritic cells. It is strongly expressed by monocytes. On lymphocytes, CD86 appears as a B-cell activation antigen. CD86 is preferentially expressed by memory B cells and germinal center B cells, but not on plasma cells. Its expression can be up-regulated by activation through surface immunoglobulin, CD40, MHC class II molecules or by PMA with ionomycin. T cells activated by CD3 ligation have also been reported to express CD86.

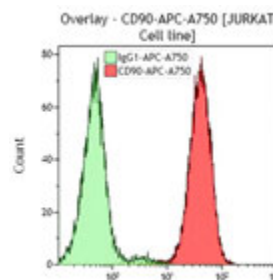


Lysed normal whole blood sample.

Clone: HA5.2B7		Isotype: IgG2b Mouse			
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2729U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B30647	Liquid	IOTest
PC7	0.5 mL	ASR	B30648	Liquid	IOTest
APC-A750	0.5 mL	ASR	B30646	Liquid	IOTest

CD90

The human CD90 antigen (also known as Thy-1) is the smallest (18 kDa) member of the immunoglobulin gene superfamily (IgSF). It is a highly glycosylated molecule with a glycosyl-phosphatidylinositol (GPI) anchor consisting of a single IgSF variable domain. The CD90 molecule has a broad tissue distribution and is expressed in nervous tissue, connective tissue and various stromal cell lines. It characterizes a rare subset of human fetal bone marrow cells, that contains multipotent hematopoietic progenitor activity. This antigen is expressed on a subset of CD34 positive cells from human bone marrow, cord blood or fetal liver. It is also expressed on very small subsets of thymocytes and peripheral T-lymphocytes.



Jurkat cell line: IL-2 producing T lymphocyte cell line

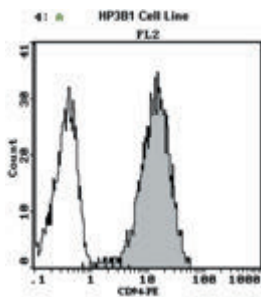
Clone: F15-42-1-5		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1839U	Liquid	IOTest
PE	2 mL	ASR	IM1840U	Liquid	IOTest

Clone: Thy1/310		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
PC5	1 mL	ASR	IM3703	Liquid	IOTest
APC-A750	0.5 mL	ASR	B36121	Liquid	IOTest
PB	0.5 mL	ASR	B30649	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD94

CD94 is a type II transmembrane glycoprotein of 30 kDa, belonging to the Ca^{++} -dependent (C-type) lectin family. Like NKG2A (or Kp43) on human natural killer (NK) cells, CD94 associates with one member of the NKG2 family to form disulphide-linked, NK cell receptor for MHC class I molecules, with a broader specificity than the human killer cell inhibitory (KIR) / activator (KAR) receptors of the Ig-superfamily. Ligation of CD94 either potently triggers or inhibits NK cell proliferation and cell-mediated cytotoxicity. Recent studies strongly indicate that the specificity of CD94/NKG2 receptors is for HLA-E, a non-classical MHC class I molecule. CD94/NKG2A and CD94/NKG2B heterodimers constitute inhibitory NK cell receptors, whereas the association of CD94 with NKG2C corresponds to an activating receptor. The expression of CD94 appears restricted to most NK cells and to a T lymphocyte subpopulation including a subset of $\gamma\delta$ TCR⁺ T-cells and $\alpha\beta$ TCR⁺ CD8⁺ CD56⁺ T-cells, mainly V α 2/V δ 2.



Staining of HP3B1 Cell line.

Clone: HP-3B1 Isotype: IgG2a Mouse

Ligation of CD94 with the HP-3B1 monoclonal antibody inhibits IL-2-dependent proliferation of NK-cells, and induces apoptosis in a subset of IL-2-stimulated NK cells.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM2276	Liquid	IOTest
APC	0.5 mL	ASR	B09980	Liquid	IOTest

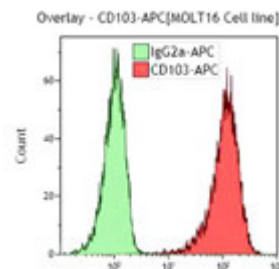
CD95

The CD95 (Fas or APO-1) antigen is a 40-50 kDa transmembrane glycoprotein. It belongs to the Tumor Necrosis Factor (TNF) superfamily and contains three cysteine-rich repeats. This cell surface molecule mediates apoptosis (programmed cell death). CD95 antigen is expressed on a substantial proportion of peripheral blood CD4⁺ lymphocytes, CD8⁺ lymphocytes and B lymphocytes but on a minor proportion of NK cells. It is not found on platelets or erythrocytes, but is expressed variably on granulocytes and monocytes. CD95 is strongly up-regulated on activated T cells, B cells, NK cells and thymocytes. Moreover, it is widely expressed on cell lines of T, B, NK and myeloid lineages. Most other tissues express CD95.

Clone: CH11			Isotype: IgM Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.05 mg	RUO	IM1504	Liquid	-
Clone: UB2			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	50 tests	RUO	IM1506	Liquid	-
PE	50 tests	RUO	IM1739	Liquid	-

CD103

The CD103 antigen was originally described as the human mucosal antigen 1 (HML-1) and was subsequently proved to be the integrin α E subunit. CD103 is composed of a 150 kDa chain associated with a 25 kDa chain by a disulfide bond. It is expressed as a heterodimer in association with the integrin β 7 chain. CD103 is expressed on mucosa-associated T lymphocytes and activated cells. This human intra-epithelial lymphocyte marker is expressed in very few resting peripheral blood lymphocytes. α EB7 binds to E-cadherin on epithelial cells. Activation and TGF β -1 induce CD103 expression.



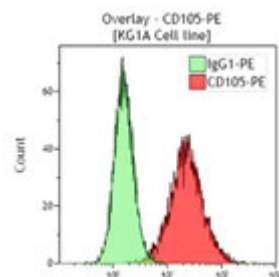
MOLT16 Cell line.

Clone: 2G5			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0318	Freeze-dried	-
FITC	2 mL	ASR	IM1856U	Liquid	IOTest
APC	0.5 mL	ASR	B06204	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD105

The CD105 antigen is a 170-180 kDa RGD-containing molecule which is present on the cell surface as a disulphide-linked homodimer. The molecule is a co-receptor for TGF β 1 and β 3. It is expressed mainly on endothelial cells, but also strongly in pre-B lymphocytes and in a subpopulation of monocytes.

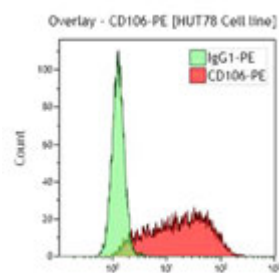


KG1A Cell line.

Clone: 1G2				Isotype: IgG3 Mouse	
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A07414	Liquid	IOTest
Clone: TEA3/17.1.1				Isotype: IgG1 Mouse	
The TEA3/17.1.1 monoclonal antibody reacts with endothelial cells from various tissues, monocytes, pre B lymphocytes and proerythroblasts from bone marrow.					
Form	Size	Status	Part#	Format	Line
PC7	1 mL	ASR	B43293	Liquid	IOTest

CD106

The CD106 antigen, VCAM-1 (Vascular Cell Adhesion Molecule-1), is an adhesion molecule which binds to integrin α 4/ β 1 (VLA-4) and integrin α 4/ β 7 on lymphocytes. It is a 110 kDa membrane protein. CD106 antigen is present on activated endothelial cells, tissue macrophages, dendritic cells and bone marrow fibroblasts. It is involved in the adhesion of lymphocytes, monocytes and eosinophils to activated endothelium.

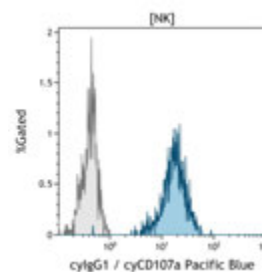


HUT78 Cell line.

Clone: 1G11			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM1244	Freeze-dried	-
PE	100 tests	RUO	A66085	Liquid	IOTest

CD107a (LAMP-1)

The CD107a antigen is the heavily glycosylated 110 kDa lysosomal-associated membrane protein, LAMP-1. Together with LAMP-2, they are the major glycoproteins on the membrane of lysosome granules. CD107a molecule is ubiquitously found as intracellular antigen. It is also expressed on the surface of activated platelets, PHA activated, a few monocytic cell lines, and fetal thymus stromal cells. It has been described as a marker of cytotoxic CD8+ T cell degranulation and of NK cell functional activity. As platelet activation marker, it has characteristics of an adhesive molecule. A minor fraction (<2%) of LAMP-1 is associated with the plasma membrane of most nucleated cells, presumably as a result of selective exchange of lysosomal and plasma membranes. Increased surface expression of LAMP-1 has been observed on transformed cells of high metastatic potential, and on embryonic cells.



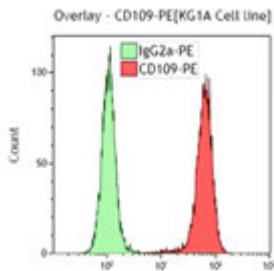
Lysed normal whole blood sample gated on NK cells.

Clone: H4A3			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
APC	0.5 mL	ASR	B12934	Liquid	IOTest
PB	0.5 mL	ASR	B13978	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD109 (E123)

The CD109 antigen is a monomeric glycosyl phosphatidylinositol (GPI)-linked glycoprotein of 170 kDa that contains several N-linked endoglycosidase H-sensitive hybrid-type glycans but no O-linked glycan. It has been reported as a novel member of the $\alpha 2$ macroglobulin ($\alpha 2M$) / C3, C4, C5 family of thioester-containing proteins. The CD109 antigen is found on vascular endothelial cells, some epithelial cells, activated, but not resting, T-cells, activated, but not resting, platelets, leukemic megakaryoblasts and a subset of bone marrow CD34⁺ cells. This antigen is not expressed on fresh peripheral blood lymphocytes (PBL). Poorly differentiated (CD34⁺, TdT⁺, CD7⁺) T-acute leukemias and rare cases of chronic myeloid leukemia in megakaryoblast crisis express the CD109 antigen. Furthermore, megakaryoblastoid cell lines (MO7e, MOLM-1) are CD109⁺. The CD109 antigen, strongly expressed on KG1a cell line with 20,000 binding sites per cell, may represent a very early marker for hematopoietic cells committed to the megakaryocyte lineage. In contrast, the adult bone marrow CD34⁺ CD109⁺ subset identifies the most primitive hematopoietic stem cells capable of long-term culture and lymphoid progenitors of the B-cell lineage.



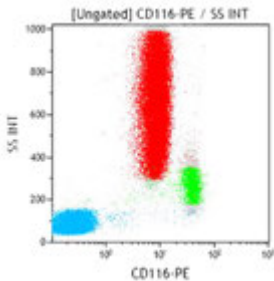
KG1a Cell line.

Clone: 8A3 Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A08933	Liquid	IOTest

CD116 (GM-CSFR)

The CD116 antigen, a 75-85 kDa molecule, is the human Granulocyte-Monocyte Colony-Stimulating Factor (GM-CSF) receptor α chain. The CD116 antigen is not expressed by lymphocytes, but strongly by monocytes and granulocytes as well as their precursors. It is also present on endothelial cells, fibroblasts and Langerhans cells. CD116 associates with the common β chain (CDw131) of the IL-3 and IL-5 receptors to form a high affinity receptor for GM-CSF.



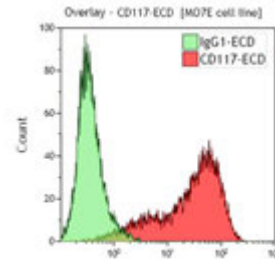
Lysed normal whole blood sample.

Clone: SC06 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM1977	Liquid	IOTest

CD117 (c-kit)

The CD117 antigen is the 145 kDa protooncogene c-kit. It belongs to the class III receptor tyrosine kinase family. This antigen is the receptor for the stem-cell factor (SCF) encoded by the steel locus (Steel Locus Factor "SLF"). The CD117 antigen is expressed on very few normal bone marrow cells. The majority of CD117⁺ marrow cells co-express CD34. CD117 is also expressed on mast cells.



MO7E cell line.

Clone: 95C3 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM1360U	Liquid	IOTest
PC5	1 mL	ASR	IM2657U	Liquid	IOTest

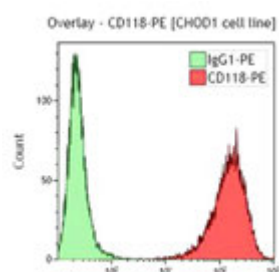
Clone: 104D2D1 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	100 tests	CE	IM2732	Liquid	IOTest
PE	2 mL	ASR	IM2732U	Liquid	IOTest
ECD	0.5 mL	ASR	B38307	Liquid	IOTest
PC5	100 tests	CE	IM2733	Liquid	IOTest
PC5	1 mL	ASR	IM2733U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A66333	Liquid	IOTest
PC7	1 mL	ASR	IM3698	Liquid	IOTest
APC	1 mL	ASR	IM3638	Liquid	IOTest
APC	100 tests	CE	B36300	Liquid	IOTest
APC-A750	0.5 mL	ASR	A86051	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD118 (LIFR)

The CD118 antigen is the α subunit of the human leukemia inhibitory factor receptor (LIFR). It is a 190 kDa type I transmembrane glycoprotein belonging to the hematopoietin family of receptors. It associates with CD130, the common gp130 β -chain shared with the IL-6 cytokine family. The α subunit extracellular domain, composed of 789 residues, consists of an N-terminal domain followed by two cytokine receptor homology (CRH) domains, separated by an immunoglobulin-like domain, and three fibronectin type III-like domains close to the membrane. The two CRH domains contain close to their C-terminal two conserved tryptophan-serine-X-tryptophan-serine (WSXWS) motifs. The transmembrane domain of 25 residues precedes the cytoplasmic tail of 239 residues. The CD118 antigen is not found on circulating blood cells, but it is expressed by a wide variety of cells including: embryonic stem cells, hepatocytes, adipocytes, neural and glial cells, osteoblast, and myoblasts. Two ligands are known for the heterodimeric receptor, the LIF and the OSM cytokines. The LIF cytokine binds to the Ig-like domain of the LIFR α chain with low affinity and then bind to the CHR domain of the β -chain to deliver the signal transduction by activation of two pathways, the JAK/STAT pathway, and the RAS/RAF1/MEK/ERK MAP kinase pathway. LIF, initially described on the basis of its ability to induce differentiation of murine myeloid leukemia cells, is a pleiotrophic cytokine that induces expression of proinflammatory cytokines, and plays important roles in the immune system, during hematopoiesis, in heart development, in adipocyte lipid transport, in reproduction, in neural system and in bone remodeling.



CHOD1 Cell line.

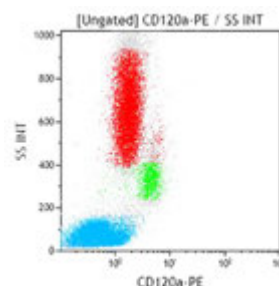
Clone: 7G7**Isotype: IgG1 Mouse**

The 7G7 monoclonal antibody is a non-blocking monoclonal antibody.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A32346	Liquid	IOTest

CD120a (TNFR1)

The CD120a molecule (also known as tumor necrosis factor-receptor type 1, or TNF-R1) is a 55 kDa, integral membrane glycoprotein. Its extra-membraneous part shows 4 cysteine-rich domains (CRDs), one of which seems to be required for ligand binding. CD120a is the main receptor for TNF- α . Also able to bind to this receptor, although with lower affinity than TNF- α , are lymphotoxin- α (LT α), also known as TNF- β when secreted as a soluble homotrimer, as well as the membrane-associated LT α 2/ β 1 heterotrimer. From a functional perspective, signaling by the TNF receptor family requires clustering of 3 receptors by trimeric ligands and subsequent association of the intracellular tails with transduction factors. The cytoplasmic tail of CD120a carries a death domain (DD) which can be involved in an apoptotic cascade. However, this receptor can trigger multiple potential downstream pathways; apart from being able to mediate apoptosis, it can modulate inflammation or activate nuclear factor-kappa B (NF- κ B). Phosphorylation of CD120a by p42^{mapk/erk2} inhibits the apoptotic activity of CD120a while preserving its ability to activate NF- κ B. Virtually all nucleated mammalian cells, including lymphocytes, monocytes, macrophages, neutrophils, endothelial cells, hepatocytes, chondrocytes, and fibroblasts, constitutively express CD120a receptor at low - medium levels. In contrast, basophils, and eosinophils express very low or undetectable levels of CD120a, whereas mature erythrocytes and platelets are uniformly negative for its expression.



Lysed normal whole blood sample.

Clone: H398**Isotype: IgG2a Mouse**

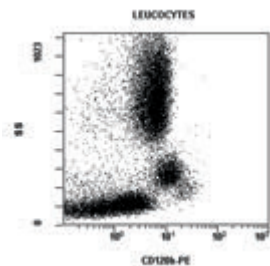
The H398 monoclonal antibody (mAb) blocks the binding of TNF- α to the CD120 molecule.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A22359	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD120b (TNF-R2)

The CD120b molecule, also known as tumor necrosis factor-receptor 2 (TNF-R2) is a 75 kDa, integral membrane glycoprotein and a member of the tumor necrosis factor (TNF) receptor superfamily. Its extra-membrane portion shows 4 cysteine-rich domains (CRDs), one of which seems to be required for ligand binding. The CD120b molecule is a receptor for TNF- α . Lymphotoxin- α (LT α), also known as TNF- β when secreted as a soluble homotrimer, as well as the membrane-associated LT α 2/ β 1 heterotrimer. Soluble TNF resulting from cleavage of membrane TNF by the TNF- α converting enzyme (TACE) can also bind to the CD120b receptor. From a functional perspective, signaling by TNF receptor family requires clustering of 3 receptors by trimeric ligands and subsequent association of the intracellular tails with transduction factors, like the TNF receptor-associated factors (TRAF). TNF-R2 triggering can lead to NF- κ B activation, but does not result in cell death. However, the most effective cell killing occurs when membrane bound TNF crosslinks both CD120a and CD120b receptors. The CD120b molecule (TNF-R2) is restricted to hematopoietic cells. It is expressed on monocytes, neutrophils, NK cells and dendritic cells, as well as on a subset of T cells. Very weak expression can be seen on some B cells, and no expression is reported on basophils.

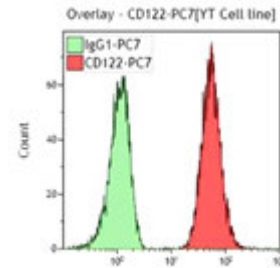


Lysed normal whole blood sample.

Clone: 80M2		Isotype: IgG1 Mouse				
Form	Size	Status	Part#	Format	Line	
PE	100 tests	RUO	A22360	Liquid	IOTest	

CD122 (IL-2R β)

The CD122 antigen is the human IL-2 receptor β chain (p75). CD122 associates with CD25 and CD132 (IL-2R γ) to form the IL-2 high affinity receptor. It is also a component of the IL-15 receptor. CD122 can directly bind IL-2 and is involved in IL-2 signal transduction. The CD122 antigen is expressed on NK cells, B and T lymphocytes and monocytes.

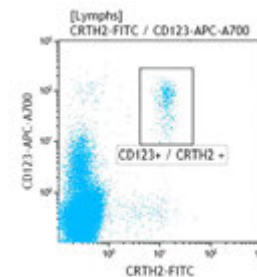


YT Cell line.

Clone: CF1		Isotype: IgG1 Mouse				
Form	Size	Status	Part#	Format	Line	
PC7	1 mL	ASR	A53365	Liquid	IOTest	
Clone: 2RB (IL-2R (p75))		Isotype: IgG1 Mouse				
Form	Size	Status	Part#	Format	Line	
FITC	100 tests	RUO	6604931	Freeze-dried	COULTER CLONE	

CD123 (IL-3R α)

The CD123 antigen, alias Interleukin-3 alpha receptor (IL-3R α), belongs to the cytokine receptor family. It is constitutively expressed by committed hematopoietic stem / progenitor cells, by most of the myeloid lineage (CD13 $^{+}$, CD14 $^{+}$, CD33 $^{+}$, CD15 ^{low}), and by some CD19 $^{+}$ cells, it is absent from CD3 $^{+}$ cells.



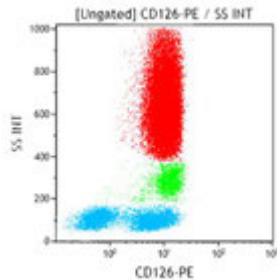
Lysed normal whole blood sample gated on lymphocytes. CD123-APC-A700 in dual staining with CRTH2-FITC.

Clone: SSDCLY107D2		Isotype: IgG1 Mouse				
Form	Size	Status	Part#	Format	Line	
PE	2 mL	ASR	A32535	Liquid	IOTest	
ECD	0.5 mL	ASR	B20027	Liquid	IOTest	
PC5.5	0.5 mL	ASR	B20022	Liquid	IOTest	
PC7	0.5 mL	ASR	B13647	Liquid	IOTest	
APC	0.5 mL	ASR	B06376	Liquid	IOTest	
APC-A700	0.5 mL	ASR	B24028	Liquid	IOTest	
Clone: 9F5		Isotype: IgG1 Mouse				
Form	Size	Status	Part#	Format	Line	
PE	1 mL	ASR	B14808	Liquid	IOTest	

SINGLE-COLOR LIQUID REAGENTS

CD126 (IL-6R α)

The CD126 antigen is the human IL-6 receptor α chain. It is an integral membrane protein of 80 kDa. In peripheral blood it is detectable on monocytes, on activated B lymphocytes, and on CD4⁺ T lymphocytes. This antigen is also expressed by epithelial cells. The CD126 antigen associates with CD130 to form a high affinity IL-6 receptor. A soluble form of CD126 (sIL-6R) can be detected in plasma.

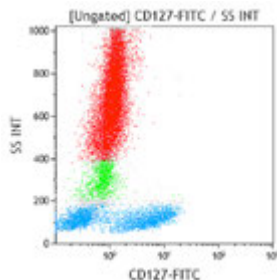


Lysed normal whole blood sample.

Clone: M91		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM1979	Liquid	IOtest

CD127 (IL-7R α)

The CD127 antigen is the human IL-7 receptor α chain. It is a 75-80 kDa molecule. CD127 is found on normal B cell precursors but not on mature B lymphocytes. It is also expressed by the majority of T lymphocytes, a subset of monocytes and a subset of CD34⁺ cells. CD127 associates with CD132 (IL-2R γ) to form the high affinity IL-7 receptor. Receptor expression is down-regulated following T cell activation.

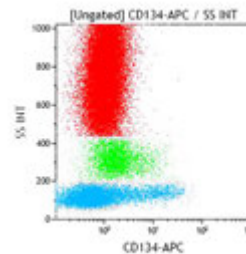


Lysed normal whole blood sample.

Clone: R34.34		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B25366	Liquid	IOtest
PE	2 mL	ASR	IM1980U	Liquid	IOtest
PC5	1 mL	ASR	A64617	Liquid	IOtest
PC7	1 mL	ASR	A64618	Liquid	IOtest
APC	0.5 mL	ASR	B42026	Liquid	IOtest
APC-A700	0.5 mL	ASR	A71116	Liquid	IOtest
APC-A750	0.5 mL	ASR	B12700	Liquid	IOtest

CD134 (OX 40)

The CD134 antigen is a 35 kDa, type-1 transmembrane glycoprotein member of the tumor necrosis factor superfamily (TNFRSF) and is allocated number 4. This antigen was originally named OX40 from the first antibody that led to the discovery of this antigen on activated rat CD4⁺ T cells. In humans, CD134 is expressed at high levels on activated CD4⁺ T cells and virally stimulated CD4⁺ T cells. Its ligand, known as gp34, is a type-2 transmembrane glycoprotein member of the tumor necrosis factor (TNF) superfamily, expressed on activated T and B cells, dendritic cells and macrophages. The CD134 antigen, through its interaction with adaptor proteins TRAF2, TRAF3 and TRAF5, is a costimulatory signal transducer of T-cell receptor-mediated activation that has been shown to activate NF- κ B, a signaling factor involved in transcription of survival genes. Thus, CD134 engagement with its ligand induces clonal expansion and survival of CD4⁺ cells during primary responses, and results in the accumulation of increasing numbers of memory cells with time. Finally, CD134 has been shown to be involved in the T cell adhesion to endothelium.

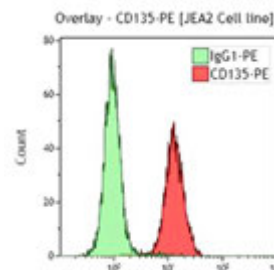


Lysed normal whole blood sample.

Clone: Ber-ACT35		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
APC	0.5 mL	ASR	B30629	Liquid	IOtest

CD135 (flt3/flk2)

CD135, also called FLT3 or FLK2, is an integral membrane protein of 130 kDa to 150 kDa, which belongs to the receptor tyrosine kinase (RTK) family. These receptors directly bind extracellular ligands and transduce regulatory signals through intracytoplasmic tyrosine kinase activity. The CD135 antigen is expressed on myelomonocytic and primitive B cell progenitors. On normal bone marrow cells, expression of CD135 can be found on fractions of CD34⁺ as well as CD34⁺ cells. Most of the CD34⁺CD135⁺ cells co-express c-kit (CD117) at high levels.



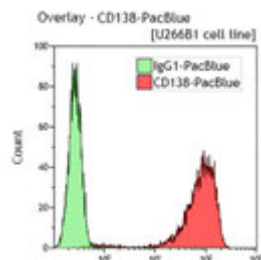
JEA2 Cell line.

Clone: SF1.340		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2234U	Liquid	IOtest

SINGLE-COLOR LIQUID REAGENTS

CD138

The CD138 antigen (also known as syndecan-1) is a member of the syndecan family, which is comprised of 4 types of transmembrane heparan sulfate proteoglycans macromolecules (syndecan-1, -2 or fibroglycan, -3 or N-syndecan, and -4 or amphiglycan). Syndecan molecules are involved in interactions with extracellular matrix proteins, with cell-surface molecules and with soluble proteins such as cytokines. Most adherent mammalian cells are reported to express heparan sulfate proteoglycans (including syndecan-1) and the expression seems to be developmentally regulated.

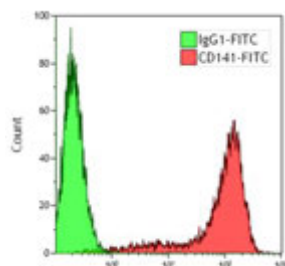


U266B1 cell line.

Clone: B-A38			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A40316	Liquid	IOTest
PE	100 tests	CE	A54190	Liquid	IOTest
PC5	100 tests	CE	A54191	Liquid	IOTest
PC5	1 mL	ASR	A40317	Liquid	IOTest
PC5.5	0.5 mL	ASR	A98835	Liquid	IOTest
APC	0.5 mL	ASR	A87787	Liquid	IOTest
PB	0.5 mL	ASR	B37788	Liquid	IOTest
KrO	0.5 mL	ASR	B42019	Liquid	IOTest

CD141 (BDCA-3)

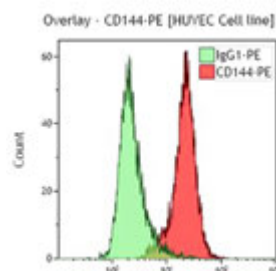
CD141, also known as thrombomodulin (TM) and BDCA-3, is an endothelial cell surface receptor. It is a 75 kD type I membrane glycoprotein and members of C-type lectin family. Two major isoforms exist, differentiated by the presence or not of sulfated glycosaminoglycan at Ser/Thr region. CD141 antigen is expressed on neutrophils, monocytes, platelets, a subpopulation of myeloid dendritic cells, vascular endothelial cells, and keratinocytes. It is a cofactor in the activation of protein C and initiation of the protein C anticoagulant pathway by binding to its ligand thrombin.

Overlay - CD141-FITC
K562 Transfected cell line

Clone: M80			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B43289	Liquid	IOTest

CD144 (VE-Cadherin)

CD144, also called Cadherin 5 or VE-Cadherin is a 140 kDa protein belonging to the cadherin family of cell adhesion molecules. CD144 antigen is specific for endothelial cells and is located at the intercellular cleft sites of the junction within endothelial tissue. The cadherin 5 molecule may play a role in the permeability properties of vascular endothelium.

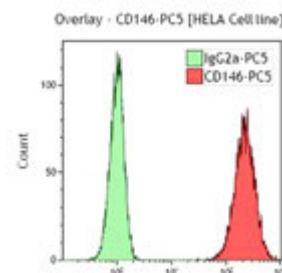


HUVEC Cell line.

Clone: TEA 1/31			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A07481	Liquid	IOTest

CD146

The CD146 molecule, also known as S-Endo, is a single chain transmembrane glycoprotein with a molecular weight of 118 kDa, belonging to the immunoglobulin superfamily (IgS). The extracellular structure consists of five Ig-like domains: two V-type, and three C2-type Ig-like domains. The CD146 antigen is related to cell adhesion molecules of the IgS family and its presence is concentrated at regions of cell-cell contact, confirming its role in adhesion and particularly in maintenance of monolayer integrity. CD146 is constitutively expressed in the endothelium, and is also observed on other cell types such as smooth muscle cells, and intermediate trophoblasts. Among peripheral whole blood leucocytes, CD146 expression is not detected, except on a subset of activated T-lymphocytes.



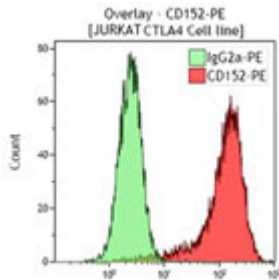
HELA Cell line.

Clone: TEA 1/34			Isotype: IgG2a Mouse		
The TEA 1/34 monoclonal antibody was assigned to the CD146 (Code: E077) during the HLDA 6.					
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A07483	Liquid	IOTest
PC5	1 mL	ASR	A22364	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD152 (CTLA-4)

The CD152 antigen, also called CTLA4, is an integral membrane protein belonging to the immunoglobulin superfamily, which is expressed either as a 30 kDa monomer or as a disulfide-linked homodimer. It has homology with the T cell antigen CD28, and like CD28, is a ligand for CD80 and CD86. CTLA-4 is transiently expressed by activated T cells and is not detectable in resting T cells. CD152 and CD28 are involved in the costimulation required for T cell activation.



JURKAT CTLA4 Cell line.

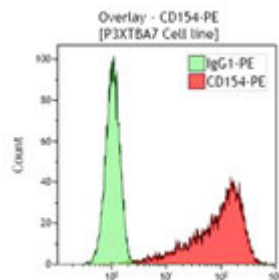
Clone: BNI3 Isotype: IgG2a Mouse

The BNI3 antibody can be used to detect intracytoplasmic CD152 (CTLA4) by flow cytometry after permeabilization with IntraPrep Permeabilization Reagent.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM2070	Freeze-dried	-
PE	100 tests	RUO	IM2282	Liquid	IOTest

CD154

The CD154 antigen (CD40-ligand), also known as TRAP (Tumor necrosis factor Related Activation Protein), is a member of the Tumor Necrosis Factor (TNF) superfamily. It is a 32 kDa type II transmembrane molecule. CD154 molecule is induced on the surface of activated T cells, mainly on CD4⁺ T lymphocytes. This ligand for the CD40 molecule is present on some basophils and mast cells. It has critical regulatory roles in T- and B-lymphocyte function.



P3XTBA7 Cell line.

Clone: TRAP-1 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2216U	Liquid	IOTest

CD157

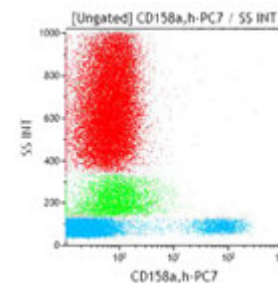
The CD157 antigen (BST-1) is a highly glycosylated, glycosyl-phosphatidylinositol (GPI)-anchored membrane protein with a molecular weight of 43 kDa. The amino acid sequence of human BST-1 has 33% identity with CD38. As with CD38, BST-1 displays ADP ribosyl cyclase activity and facilitates pre-B cell growth. CD157 antigen is expressed on monocytes, neutrophils and all lymphoid and myeloid precursors. Its expression is restricted to certain fractions (CD44⁺CD25⁺ and CD44⁺CD25⁻) of CD3⁺CD4⁺CD8⁻ T progenitors.

Clone: RF3 Isotype: IgG Mouse

Form	Size	Status	Part#	Format	Line
FITC	0.05 mg	RUO	IM2557	Liquid	-

CD158a,h

The CD158a and CD158h molecules are monomeric integral membrane glycoproteins existing in different forms. CD158a, or p58.1, is a 58 kDa molecule, and CD158h, or p50.1, is a 50 kDa molecule, both having identical extracellular portions, but different transmembrane and cytoplasmic regions. Another comprehensive nomenclature refers to these molecules as KIR2DL1 for CD158a and KIR2DS1 for CD158h. These acronyms stand for Killer cell Immunoglobulin (Ig)-like Receptor (KIR), with extracellular part containing 2 Ig Domains (2D), and cytoplasmic tails being either long (L) or small (S). The long intracellular portion of CD158a, or p58.1, makes it an inhibitory form, since it contains two characteristic ITIM motifs (Immunoreceptor tyrosine based inhibition motif) and is involved in the transduction of the inhibitory signal. Whereas the stimulatory form CD158h, or p50.1, lacks these ITIM motifs. CD158a/p58.1 functions as an inhibitory receptor for a group of HLA-C molecules (Cw2, cw4, Cw5 and Cw6 supertypes). The inhibitory effect is dominant over the activation exerted by the activator form p50.1. The CD158a and CD158h molecules are indistinguishable from the extracellular viewpoint. They are expressed by a subset of NK cells, and can be detected on the surface of sub-populations of peripheral T lymphocytes, mostly of the CD8⁺ phenotype.



Lysed normal whole blood sample.

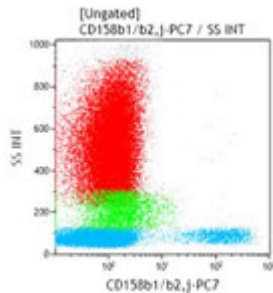
Clone: EB6B Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	A09778	Liquid	IOTest
PC5.5	0.5 mL	ASR	A66898	Liquid	IOTest
PC7	0.5 mL	ASR	A66899	Liquid	IOTest
APC	0.5 mL	ASR	A22332	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD158b1/b2,j

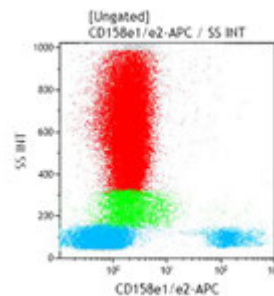
The CD158b1, CD158b2 and CD158 j molecules are monomeric integral membrane glycoproteins existing in different forms. CD158b1 and CD158b2 (p58.2 and p58.3, respectively) are 58 kDa molecules. CD158j (p50.2) is a 50 kDa molecule. All three have identical extracellular portions, but different transmembrane and cytoplasmic regions. CD158b1 and CD158b2 likely represent allelic forms of the same locus. There is another comprehensive nomenclature which refers to these molecules as KIR2DL2 for CD158b1 (p58.2), KIR2DL3 for CD158b2 (p58.3), and KIR2DS2 for CD158j; these acronyms stand for Killer cell Immunoglobulin (Ig)-like Receptor (KIR), with extracellular part containing 2 Ig Domains (2D), and cytoplasmic tails being either long (L) or short (S). The long intracellular portion of CD158b1/b2 (p58.2/p58.3) makes them inhibitory forms, since they contain two characteristic ITIM motifs (Immunoreceptor Tyrosine-based Inhibition Motif) and are involved in the transduction of an inhibitory signal through the activation of the protein tyrosine phosphatases SHP-1 and/or SHP-2. The stimulatory form CD158h (p50.1) lacks these ITIM motifs. CD158b1/b2 (p58.2/p58.3) function as inhibitory receptors for a group of HLA-C molecules (Cw1, Cw3, Cw7 and Cw8 supertypes). The inhibitory effect is dominant over the activation exerted by the activator form p50.2. The CD158b1/b2 and CD158j molecules are indistinguishable from the extracellular viewpoint. They are expressed by a subset of NK cells, and can be detected on the surface of sub-populations of peripheral T lymphocytes, mostly of CD8⁺ phenotype.



Lysed normal whole blood sample.

CD158e1/e2

The CD158e1 and CD158e2 molecules (also known as p70 molecules) are monomeric integral membrane glycoproteins of 70 kDa. CD158e1 and CD158e2 likely represent allelic forms of the same locus of the NKBI gene. These proteins belong to the family of NK receptors for MHC class I molecules and show a high degree of homology with p58 and p140 receptors. There is another comprehensive nomenclature which refers to these molecules as KIR3DL1 for CD158e1, and KIR3DS1 for CD158e2. These acronyms stand for Killer cell Immunoglobulin (Ig)-like Receptor (KIR), with extracellular part containing 3 Ig Domains (3D), and cytoplasmic tails being either long (L) or short (S). CD158e1 comprises 3 C-type extracellular Ig domains, and two characteristic ITIM motifs (Immunoreceptor Tyrosine-based Inhibition Motif) in the intracellular portion. These motifs are involved in the transduction of an inhibitory signal through the activation of the protein tyrosine phosphatases SHP-1 and/or SHP-2. CD158e1/e2 function as inhibitory receptors for HLA-B molecules of the Bw4 supertype. These molecules are expressed by a subset of NK cells, and can be detected on the surface of sub-populations of peripheral T cells, mostly of CD8⁺ phenotype.



Lysed normal whole blood sample.

Clone: Z27.3.7

Isotype: IgG1 Mouse

The anti-KIR/p70 antibody Z27 restores the ability of p70+ NK clones to lyse HLA-Bw4 targets.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM2748	Freeze-dried	-
PE	1 mL	ASR	IM3292	Liquid	IOTest
APC	0.5 mL	ASR	A60795	Liquid	IOTest

Clone: GL183

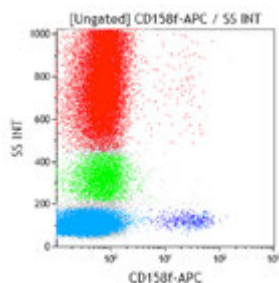
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM1846	Freeze-dried	-
PE	1 mL	ASR	IM2278U	Liquid	IOTest
PC5.5	0.5 mL	ASR	A66900	Liquid	IOTest
PC7	0.5 mL	ASR	A66901	Liquid	IOTest
APC	0.5 mL	ASR	A22333	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD158f (KIR2DL5)

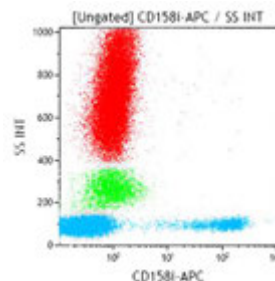
The CD158f molecule (also known as KIR2DL5) is a 60 kDa monomeric glycoprotein with two Ig-like extracellular domains and a long cytoplasmic domain. CD158f is an inhibitory receptor and a member of the KIR (Killer-cell Immunoglobulin-like Receptor) family of receptors, which recognizes subsets of HLA-Class I alleles. KIR2DL5 gene is found in only a fraction of individuals in the population, and it is represented in the human genome by two genes, KIR2DL5A and KIR2DL5B. KIR2DL5 has alleles with mRNA transcripts that are clonally distributed in NK and T lymphocytes. KIR2DL5 is predicted to encode a purely inhibitory receptor, according to its signaling motifs (two ITIMs (Immunoreceptor Tyrosine-based Inhibition Motif) and a 1 transmembrane region lacking charged amino acid residues). KIR2DL5, together with KIR2DL4, are the only members of a gene lineage coding for KIR with a D0-D2 organization of the Ig-like domains, which distinguishes them from all other KIR2Ds, having domains of the D1-D2 type. Upon tyrosine phosphorylation, KIR2DL5 recruits the Src homology region 2-containing protein tyrosine phosphatase-2 and, to a lesser extent, Src homology region 2-containing protein tyrosine phosphatase-1. KIR2DL5 is an inhibitory receptor which may play a specialized role in innate immunity. In particular, it is expressed in a fraction of blood NK cells with the CD56^{dim} phenotype and in a variable proportion of circulating T lymphocytes.



Lysed normal whole blood sample.

CD158i

The CD158i molecule (also known as p50.3) is a monomeric integral membrane glycoprotein of 50 kDa. This protein belongs to the family of NK receptors for MHC class I molecules. There is another comprehensive nomenclature which refers to this molecule as KIR2DS4; this acronym stands for Killer cell Immunoglobulin (Ig)-like Receptor (KIR), with extracellular part containing 2 Ig domains (2D), and a short (S) cytoplasmic tail. CD158i comprises 2 C-type extracellular Ig domains. The intracytoplasmic portion lacks characteristic ITIM motifs (Immunoreceptor Tyrosine-based Inhibition Motif) and displays a charged residue in the trans-membrane portion. CD158i receptor seems involved in NK cell activation, following HLA-Cw3 supertype recognition. Antibody-induced cross-linking of CD158i (p50.3) results in both early activation events and late effector function.



Lysed normal whole blood sample.

Clone: FES172

Isotype: IgG2a Mouse

The FES172 antibody stains NK subsets, but the p50.3 antigen appears to be expressed only by some individuals, and to be co-expressed with p58 KIRs.

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3337	Liquid	IOTest
APC	0.5 mL	ASR	A60796	Liquid	IOTest

Clone: UP-R1

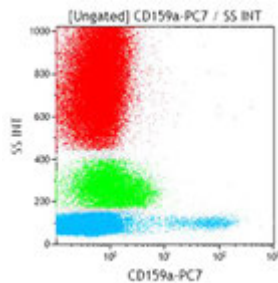
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	B19715	Liquid	IOTest
APC	0.5 mL	ASR	B19716	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD159a (NKG2a)

CD159a (NKG2a) is a 40 kDa (reduced), 75 kDa (unreduced) type II transmembrane protein associated with CD94 to form a disulphide-linked heterodimer. CD159a is a member of the Ca^{++} -dependent (C-type) lectin family. The CD94/NKG2A dimer is an inhibitory NK receptor for MHC Class I, with a broader specificity than Killer cell Immunoglobulin (Ig)-like Receptors (KIR). The intracellular portion of CD159a (NKG2A) contains two characteristic ITIM motifs (Immunoreceptor tyrosine based inhibition motif) involved in the transduction of the inhibitory signal. The CD159a (NKG2A) antigen is always co-expressed with CD94. The CD94/NKG2A complex is detectable in sub-populations of NK cells, T cells and thymocytes.



Lysed normal whole blood sample.

Clone: Z199

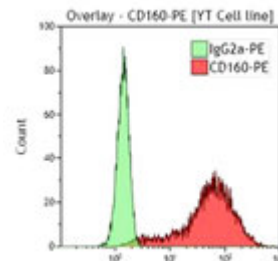
Isotype: IgG2b Mouse

The Z199 antibody reacts specifically with CD94^{bright} NK cells expressing the inhibitory form of the CD94 molecules. It does not stain the activator form of CD94 which corresponds to the association of CD94 with other products of the NKG2a gene family. The antibody restores the ability of CD94^{bright} NK clones to lyse HLA class I targets.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM2750	Freeze-dried	-
PE	1 mL	ASR	IM3291U	Liquid	IOtest
PC7	0.5 mL	ASR	B10246	Liquid	IOtest
APC	0.5 mL	ASR	A60797	Liquid	IOtest

CD160

The CD160 molecule (BY55 antigen) is a 27-kDa, glycosyl phosphatidylinositol (GPI)-anchored glycoprotein of 181 amino acids, with a single immunoglobulin (Ig)-like domain. The molecule contains two potential sites for N-glycosylation and is rich in cysteine (6 residues in the mature polypeptide), indicating an important capacity for forming intra- and inter-chain disulfide bonds, which likely support the disulfide-linked multimeric (80 kDa) expression at the cell surface. Its expression is highly restricted to circulating cytotoxic T and NK cells, and in tissues, to intestinal intraepithelial lymphocytes, as revealed by CD160 mRNA blot analysis and various phenotyping studies. In peripheral blood, CD160⁺ cells consist of a majority of CD3⁺ TCR $\gamma\delta$ ⁺ NK cells, which is significantly reduced in HIV⁺ individuals, and of a minority of CD3⁺ CD8^{bright} T lymphocytes, which is significantly increased in HIV⁺ individuals. In bone marrow, CD160⁺ cells, though less abundant than in adult peripheral blood, also consist of the two populations observed in peripheral blood. In cord blood, CD160⁺ cells consist of a unique CD3⁺ TCR⁺ NK cell population, 80% of these cells being CD56⁺. CD160 is a ligand for classical and non-classical MHC-class I molecules. The ligation of MHC-class I by CD160 provides a costimulatory signal restricted to peripheral blood activated T cells, suggesting a pathway being additional and/or alternative to the CD28 costimulation mechanism. This pathway may be relevant in memory T cells that lack CD28, such as the intestinal intraepithelial lymphocytes.



YT Cell line.

Clone: BY55

Isotype: IgM Mouse

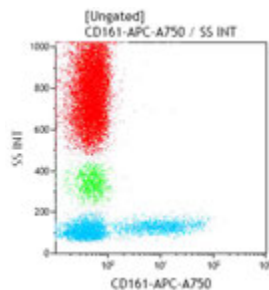
The BY55 antibody was initially reported to react with a protein structure of 80 kDa exclusively expressed by circulating cytotoxic lymphocytes. It does not block the binding of the CD160 molecule to MHC-class I molecules.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3657	Liquid	IOtest

SINGLE-COLOR LIQUID REAGENTS

CD161 (NKR-P1A)

The CD161 antigen is also designated as the NKR-P1A molecule. CD161 is a type II integral membrane protein expressed as a monomer of 44 kDa or as a disulphide-linked homodimer of 80 kDa. The carboxy-terminal extracellular domain is homologous to Ca^{++} -dependent (C-type) lectin superfamily. CD161 is an activatory NK receptor, but in contrast with other NK receptors such as KIR (p58, p70, p140) and CD94/NKG2, CD161-mediated activation is not HLA-dependent. CD161 is expressed on all NK cells and on subpopulations of T lymphocytes.



Lysed normal whole blood sample.

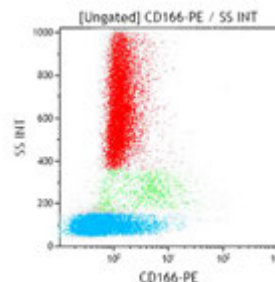
Clone: 191B8

Isotype: IgG2a Mouse

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3450	Liquid	IOTest
PC7	0.5 mL	ASR	B30631	Liquid	IOTest
APC-A750	0.5 mL	ASR	B30630	Liquid	IOTest

CD166 (ALCAM)

The CD166 antigen, also known as activated leukocyte cell adhesion molecule (ALCAM), is a single chain type 1 transmembrane glycoprotein, containing 10 potential N-linked glycosylation sites, and belonging to the immunoglobulin superfamily (IgSF). It shows a 100 – 105 kDa molecular weight, and is composed of five extracytoplasmic Ig-like domains linked to a 32-amino acid cytoplasmic tail through a short membrane-spanning region. The CD166 antigen is an adhesion molecule that binds to the CD6 molecule, or forms ALCAM-ALCAM homophilic interactions. Studies suggest that CD166 molecules can oligomerize at the site of cell-cell contact via their three C2-type Ig-like proximal domains. The CD166 molecule appears to be a non-lineage restricted molecule, expressed on a variety of cell types, including selected hematopoietic cells, endothelial cells, cortical and medullar thymic epithelial cells, bone marrow mesenchymal stem cells, fibroblasts, and hepatocytes. In peripheral blood, ALCAM is expressed on activated T- and B-cell subsets, on monocytes, on circulating dendritic cells, and weakly on granulocytes. While expressed in a wide variety of tissues, ALCAM is usually restricted to subsets of cells involved in dynamic growth and/or migration. In the thymus, the interaction between the CD6 molecule, as expressed on CD6⁺ thymocytes, and the CD166 molecule expressed on thymic epithelial cells may play a role in T cell development. Other studies suggest that the CD166 adhesion molecule is involved in embryonic hematopoiesis, as well as in hemangioblast differentiation and capillary tube formation.



Lysed normal whole blood sample.

Clone: 3A6

Isotype: IgG1 Mouse

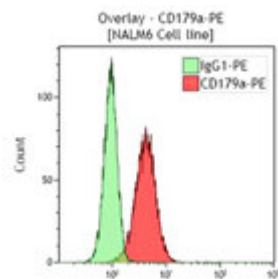
The 3A6 antibody blocks the binding of the CD6 ligand to its CD166 receptor as seen on adhesion experiments of CD6-expressing COS cells to thymic epithelial cells. The 3A6 antibody was clustered to the CD166 during HLDA 6.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A22361	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD179a (Vpre-B)

The CD179a molecule (Vpre-B) non-covalently associates with CD179b (also known as $\lambda 5$ or λ -like) to form an immunoglobulin (Ig) light chain-like structure, known as the surrogate light chain. The CD179a / CD179b surrogate light chain is disulfide-linked to the membrane-bound Ig μ heavy chain in association with the transducer CD79a / CD79b heterodimer. The CD179a / CD179b / CD79a / CD79b complex then forms a B cell receptor-like structure known as pre-B Cell Receptor (preBCR). B cell development from pluripotent stem cells proceeds through pro-B, pre-B and B stages, characterized by sequential Ig gene rearrangements and transcription, accompanied by the expression of a well-defined set of cell surface molecules. PreBCR may function as a checkpoint in early B cell development and may monitor the production of the Ig μ heavy chain through a functional rearrangement of the Ig heavy chain gene. Furthermore, preBCR may serve to check Ig μ heavy chain association with the Ig light chain. CD179a is not detected in normal mature circulating B lymphocytes and leucocyte subsets. Low levels of CD179a can be detected on the cell surface of early pre B cells but the vast majority of CD179a proteins are retained in the cytoplasm.



NALM6 Cell line.

Clone: 4G7

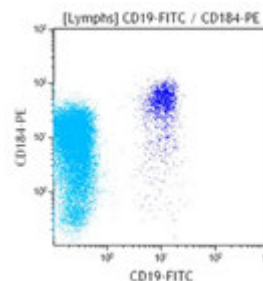
Isotype: IgG1 Mouse

The 4G7 monoclonal antibody (mAb) recognizes the VpreB protein regardless of whether it is or it is not associated with the μ chain.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	IM3647	Liquid	IOTest

CD184 (CXCR4)

CD184 (also known as CXCR4, or Fusin) is a seven-transmembrane domain G protein-coupled surface receptor. CD184 (CXCR4) natural ligand is the stromal cell-derived factor-1 (SDF-1), a C-X-C chemokine (the nomenclature specifies that this chemokine has a single amino acid between the first two cysteines of the characteristic four cysteine motif), which is strongly chemotactic for monocytes and lymphocytes. But CD184 (CXCR4) has also initially been described as the human immunodeficiency virus-1 (HIV-1) entry co-receptor, associated with the surface CD4-gp120 complex before HIV-1 enters target cells. It also acts as an alternative receptor for some isolates of HIV-2. The SDF-1 / CXCR4 pair may also play a role in the development of the nervous system. Unlike other chemokine receptors, the cellular distribution of CD184 (CXCR4) is nearly ubiquitous; it is expressed on a variety of CD4⁺ and CD4⁻ cells in the immune system and the central nervous system. In blood, CD184 (CXCR4) is highly expressed on neutrophils, monocytes, dendritic cells, NK cells, B cells, and T cells, as well as on platelets. CD184 (CXCR4) exhibits a rapid (30 seconds) up-regulation upon activation of lymphocytes, followed by internalization (within 2 minutes). Accordingly, CD184 (CXCR4) is detected in large amounts in intracellular stores within leucocytes. Absent from eosinophils and basophils in fresh whole blood, CD184 (CXCR4) is inducible ex vivo on eosinophils by glucocorticoids, and on basophils by SDF-1. As a GPCR, CXCR4 binding of SDF-1 triggers certain signaling pathways such as ras, and PI3 kinase. One downstream effect of SDF-1 / CXCR4 interaction is the activation of transcription factors such as AP-1 and chemokine regulated genes. JAK / STAT pathways also play a role in SDF-1/CXCR4 signaling.



Lysed normal whole blood sample.
Gated on lymphocytes. Dual staining
with CD19-FITC.

Clone: 12G5

Isotype: IgG2a Mouse

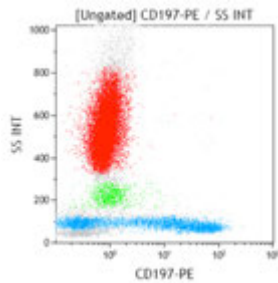
The 12G5 antibody partially inhibits chemotaxis and calcium influx induced by SDF-1. It stains predominantly the naïve, resting CD26^{low} CD45RA⁺ CD45RO⁻ T lymphocyte subset of peripheral blood T cells. The 12G5 mAb has been assigned to the CD184 cluster of differentiation during HLDA 7.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A07409	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD197 (CCR7)

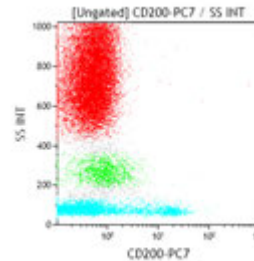
CCR7 is G protein-coupled receptors (GPCR) with seven transmembrane receptors. It binds CCL19 and CCL21. CCR7 and its ligands link innate and adaptive immunity through their effects on interactions between T cells and dendritic cells. The chemokine receptor CCR7 plays a pivotal role in the homing of naïve T cells and regulatory T cells to secondary lymphoid organs, and the migration of dendritic cells into afferent lymphatic vessels. Naïve T cells enter the lymph node through high endothelial venules, which express CCL21. Dendritic cells and macrophages enter the lymph node through afferent lymphatics. The encounter of T cells and dendritic cells in the T cell zone is CCR7-dependent. In addition, during immunological surveillance, B lymphocytes recirculate between B-cell-rich compartments (follicles or B zones) in secondary lymphoid organs, surveying for antigen. After antigen binding, B cells move to the boundary of B and T zones to interact with T-helper cells; this B cell migration is directed by CCR7 and its ligands. CCR7-positive cancer cell expression has been associated with lymph node metastasis. By bringing together T cells, B cells, and DCs to form functional microenvironments in secondary lymphoid organs, CCR7 has been identified as a major homing receptor and important regulator for initiating an antigen-specific immune response.



Lysed normal whole blood sample.

CD200

CD200 is a highly conserved membrane glycoprotein that belongs to the Ig superfamily (IgSF) containing a two immunoglobulin-like domain (V, C), a single transmembrane and a short cytoplasmic domain. Diverse cell types express CD200 on surface, including thymocytes, B cells, activated T and B cells, dendritic cells, neurons and endothelia. CD200 and CD200R are highly conserved type I membrane glycoproteins, which present N-terminal immunoglobulin-like domains based interaction. While the distribution of CD200 expression is very broad, CD200R is primarily expressed in myeloid and lymphoid cells. They fulfill multiple functions in regulating inflammation interaction by promoting inhibitory activities of the immune system. The interaction between CD200/CD200R results in activation of the intracellular inhibitory pathway with RasGAP recruitment and thus contributes to effector cell inhibition. It was confirmed that the CD200R activation stimulates the differentiation of T cells to the Treg subset, upregulates indoleamine 2,3-dioxygenase activity, modulates cytokine environment from a Th1 to a Th2 pattern, and facilitates an antiinflammatory IL-10 and TGF- β synthesis. CD200/CD200R are required for maintaining selftolerance. Many studies have demonstrated the importance of CD200 in controlling autoimmunity, inflammation, inhibitory activities, hypersensitivity.



Lysed normal whole blood sample

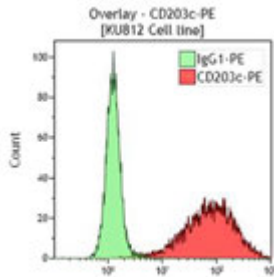
Clone: G043H7			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	B30632	Liquid	IOTest
PC7	0.5 mL	ASR	B46025	Liquid	IOTest

Clone: OX-104			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PC7	0.5 mL	ASR	B43299	Liquid	IOTest
APC-A750	0.5 mL	ASR	B43301	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD203c

The CD203c molecule is a type II transmembrane protein that belongs to the ectonucleotide pyrophosphatase / phosphodiesterase 3 (E-NPP3) family of enzymes involved in hydrolysis of oligonucleotides, nucleoside phosphates, and NAD.



KU812 Cell line.

Clone: 97A6

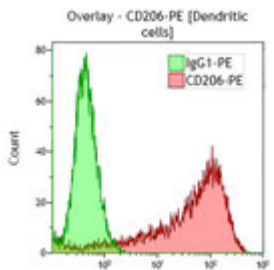
Isotype: IgG1 Mouse

The 97A6 antibody immunoprecipitates two proteins of 270 and 150 kDa at reducing conditions, and one protein of 270 kDa at nonreducing conditions, suggesting that the 97A6 antigen is a disulfide-linked dimer of two proteins of about 150 kDa each. Basophils and mast cells are hematopoietic effector cells involved in allergic and inflammatory reactions. Both cell types highly express the high affinity IgE receptor. The 97A6 antibody recognizes a surface antigen expressed on human peripheral blood basophils, but not on other blood cells. It also reacts with mature mast cells, and with CD34⁺ bone marrow progenitors of basophils and mast cells. Moreover, the 97A6 antigen is up-regulated after activation of basophils by anti-IgE antibodies and allergens.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3575	Liquid	IOTest
PC7	1 mL	ASR	A66906	Liquid	IOTest

CD206 (MMR)

CD206, also named macrophage mannose receptor (MMR), is a type I single-chain transmembrane glycoprotein of 175 kDa with a multilectin receptor structure. The Mannose Receptor is thought to play a key role in the internalization of sugar-containing proteins thus concentrating antigens for transport to processing compartments and peptide loading compartments. First detected on tissue macrophages, the Mannose Receptor is mainly expressed on immature dendritic cells and on a variety of other cells. Absent on lymphocytes and monocytes, the Mannose Receptor is up-regulated on monocytes during their differentiation to macrophages.



Dendritic cells from in vitro activated density-purified whole blood sample (PBL).

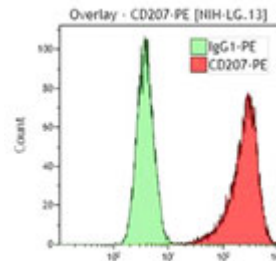
Clone: 3.29B1.10

Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2741	Liquid	IOTest
PC7	0.5 mL	ASR	B36120	Liquid	IOTest
PB	0.5 mL	ASR	B36119	Liquid	IOTest

CD207 (Langerin)

CD207 (Langerin) is an antigen described as selectively expressed by Langerhans cells (LC), a subset of immature dendritic cells (DC) formed in epidermis and mucosa. Langerin is a 40 kDa glycoprotein predominantly N-glycosylated which contains no disulfide bond. Its expression, restricted to the Langerhans cell lineage, is demonstrated at both the surface membrane and in the cytoplasm. Several lines of evidence indicate that Langerin is a marker specific for the acquisition of the Langerhans cell phenotype. It is down-regulated beyond the LC maturation stage. Langerin is not involved in antigen delivery into the MHC class II pathway but may play a role in antigen capture. Langerin is present only in epidermis and airway epithelia. Langerin is not detected in purified DCs isolated from peripheral blood, lymph nodes or thymus. CD1a⁺ DCs derived from CD34⁺ cord blood cell cultures in the presence of GM-CSF and TNF- α express Langerin between day 8 and 12. DCs derived from peripheral blood monocytes cultured with GM-CSF and IL-4 do not express Langerin.



NIH-LG.13 Cell line.

Clone: DCGM4

Isotype: IgG1 Mouse

The DCGM4 antibody stains exclusively immature DCs of the LC lineage. Both intracytoplasmic and surface membrane staining is observed. DCGM4 acts as a ligand for Langerin, triggering rapid endocytosis within 20 minutes at 37°C. The DCGM4 antibody has been used to determine the differentiation of the CD1a⁺/CD11c⁺ subset of blood DCs into LCs, and in the characterization of DCs infiltrating breast carcinoma tissue.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3577	Liquid	IOTest

CD208 (DC-LAMP)

The DC-LAMP antigen (70-90 kDa) is a new member of the LAMP (lysosome-associated membrane protein) family. As other LAMP members such as CD68, DC-LAMP is a type I integral membrane protein of 416 amino acid residues, highly glycosylated (7 N- and some O- glycosylation sites), with 90% of the molecule located in the lumen of lysosomes. DC-LAMP is specifically expressed by those mature dendritic cells (DC) located in T cell areas of lymphoid tissues, which are known as interdigitating dendritic cells (IDC). A direct correlation between the expression of DC-LAMP and that of other maturation markers such as CD86 has been established. DC-LAMP first appears in the MHC Class II compartment, suggesting an important contribution of DC-LAMP to the processing of exogenous antigens.

Clone: 104.G4

Isotype: IgG1 Mouse

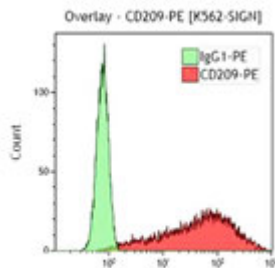
In flow cytometry, the 104.G4 antibody shows intracytoplasmic staining of DCs derived either from CD34⁺ cell cultures activated with TNF α and CD40L, or from monocyte cultures activated with TNF α , LPS and CD40L.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM3448	Liquid	-

SINGLE-COLOR LIQUID REAGENTS

CD209 (DC-SIGN)

The CD209 antigen, also named dendritic cell (DC)-specific-intracellular adhesion molecule 3 (ICAM-3)-grabbing non-integrin (DC-SIGN), is a 44 kDa type II transmembrane C-type lectin with a single carbohydrate recognition domain (CRD). Like other C-type lectin members, CD209's extracellular structure is able to bind mannose residues in a Ca^{++} dependent manner. Highly specific to DCs, CD209 plays a key role in the primary immune response as receptor / processor for a variety of ligands, including: ICAM-3: initiation of DC-T cell immunological synapse; ICAM-2: transendothelial DC migration; HIV-1 gp120: capture of HIV-1 and transpresentation to CD4^+ T cells; CMV envelope glycoprotein B: capture of CMV; Unknown ligands: capture of Ebola virus, and of Leishmania amastigotes. CD209 is expressed by immature DCs in peripheral tissues, with the noticeable exception of Langerhans cells. It is also expressed by DCs in lymphoid tissues, and by certain macrophages. In peripheral blood, a percentage of plasmacytoid DCs (or DC2) may also express CD209. It is totally absent from monocytes, and an observed up-regulation of CD209 expression on monocyte-derived DCs correlates with the down-regulation of CD14. Monocyte-derived macrophages may express CD209, only when cultured in the presence of IL-13.



K562-SIGN Cell line.

Clone: AZND1

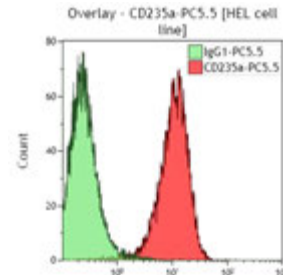
Isotype: IgG1 Mouse

The AZND1 monoclonal antibody (mAb) is useful for many purposes, including flow cytometric analysis of CD209-expressing cells, immunohistochemical analysis of CD209⁺ cells on frozen tissue sections, immunoprecipitation of CD209 antigen, and investigation of its functions, due to the blocking or inhibiting properties of AZND1 mAb. The AZND1 mAb to DC-SIGN has been assigned to the CD209 cluster of differentiation during HLDA 7.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	A07406	Liquid	-
PE	100 tests	RUO	A07407	Liquid	IOTest

CD235a (Glycophorin A)

CD235a, Glycophorin A, is a major sialoglycoprotein expressed on human red blood cells and erythroid precursor cells.



HEL cell line.

Clone: 11E4B-7-6 (KC16)

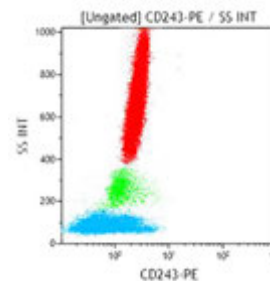
Isotype: IgG1 Mouse

The 11E4B-7-6 (KC16) antibody binds to the amino acid sequence 27-39 of glycophorin A and has no reactivity to glycophorin B. It reacts with immature erythrocytes including erythroblasts, proerythroblasts and reticulocytes.

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM2210	Freeze-dried	-
FITC	2 mL	ASR	IM2212U	Liquid	IOTest
PE	100 tests	CE	A07792	Liquid	IOTest
PE	2 mL	ASR	IM2211U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B20026	Liquid	IOTest
PC7	1 mL	ASR	A71564	Liquid	IOTest
APC-A750	0.5 mL	ASR	A89314	Liquid	IOTest

CD243 (P-glycoprotein)

The CD243 antigen (P-gp) is the 170-180 kDa multi-drug resistance (mdr)-1 gene product. This protein carries out ATP-dependent efflux of structurally diverse lipophilic compounds, including many anti-cancer chemotherapy agents. In hematopoietic cells, the mdr1 gene product is expressed, but at relatively low levels. P-gp is expressed in specialized epithelial cells with secretory or excretory functions. In the liver, P-gp is found on the biliary surface of hepatocytes and small biliary ductules; in the pancreas, on the laminal surface of epithelial cells of small ductules and, in the kidney, on the brush border of the proximal tubules. Additional sites of expression include the gastrointestinal tract, endothelial cells of the brain and the adrenal glands.



Lysed normal whole blood sample.

Clone: UIC2

Isotype: IgG2a Mouse

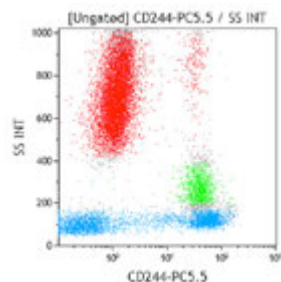
The UIC2 antibody reacts with an external epitope of the human P-glycoprotein (P-gp). UIC2 antibody inhibits Pgp-mediated efflux and potentiates the cytotoxic action of P-gp transported drugs in MDR cells.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2370U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD244 (2B4)

The CD244 antigen, also called 2B4, is a 38 kDa cell surface signal transduction molecule found on almost all human NK cells. It induces a granule independent killing mechanism by NK effector cells. It is also found on $\gamma\delta$ TCR T cells and approximately half of peripheral $\alpha\beta$ TCR CD8⁺ T cells. It is not found on B or naïve CD8⁺ T cells. Upon activation, most CD8⁺ T cells become CD244-positive. However, a small but significant minority of CD8⁺ T cells remain CD244-negative. This subset is associated with lower cytotoxic activity, lower γ -IFN production and higher IL-4 and IL-10 production. CD244 is a high affinity receptor for CD48.

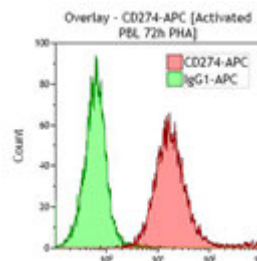


Lysed normal whole blood sample.

Clone: C1.7			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM1607	Freeze-dried	-
PE	2 mL	ASR	IM1608	Liquid	IOTest
PC5.5	0.5 mL	ASR	B21171	Liquid	IOTest

CD274 (PD-L1)

The CD274 antigen is known as Programmed Cell Death 1 ligand 1 (PDCD1LG1 or PD-L1) or B7-H1. It is encoded by a gene located on the human chromosome 9p24. Immune cell function implicates important modulators known as cosignaling receptors. On T cells, the cosignaling receptors belong to either the immunoglobulin (CD28-like) or TNF receptor (TNFR) superfamilies. The CD28 immunoglobulin-superfamily is composed of coinhibitory (CD28, ICOS) and costimulatory receptors. Programmed Death- 1 (PD-1) is one of the three coinhibitory receptors with Cytotoxic T Lymphocyte Antigen 4 (CTLA4) and CD272. CD274 antigen is one of the two ligands, with PD-1 ligand 2 (PD-L2), for PD-1 and belongs to the B7 family. The PD-1 - PD-L1 interaction plays a critical role in regulating T cell activation and tolerance. In particular, it plays a role during development by inhibiting the TCR-mediated positive selection of thymocytes. It has also been shown to be implicated in the regulation of CD4 positive T cells proliferation. CD274 antigen is expressed on immature dendritic cells (iDC), mature dendritic cells (mDC), IFN- γ -treated monocytes, and follicular dendritic cells.



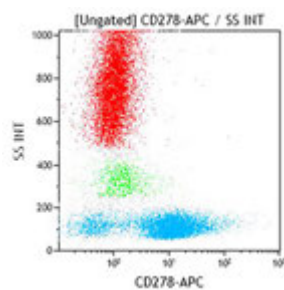
Activated PBL 72h PHA.

Clone: PD-L1			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PC7	50 tests	RUO	A78884	Liquid	IOTest
APC	0.5 mL	ASR	B36126	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD278 (ICOS)

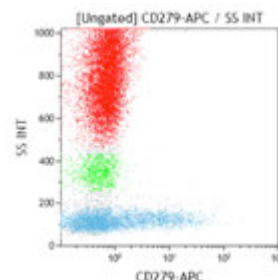
The CD278 antigen, also known as ICOS molecule (inducible T-cell costimulator, Inducible Costimulator), is a disulfide-linked homodimeric T-cell surface glycoprotein of 55-60 kDa, which belongs to the CD28 and CTLA-4 cell-surface receptor family. The CD278 molecule plays an important role in cell-cell signaling, immune responses, and regulation of cell proliferation. While CD278 antigen is not constitutively expressed on naïve peripheral blood T cells, it is highly expressed on unstimulated thymocytes of germinal centers, showing a role in T cell differentiation. Upon activation by antigen presenting cells, T cells (CD4 positive cells and CD8 positive cells) express inducible co-stimulatory receptors, including CD28, CTLA4 and ICOS. The resulting interaction of CD278 (ICOS) with its ligand ICOS-L (B7-like molecule present on B cells) participates to interleukin production, especially IL-10 and IL4. The central role of CD278 in the generation and maintenance of humoral immunity has also been shown to be important. Upon the co-stimulation of T cells through ICOS and CD28, ICOS binds its ligand ICOS-L leading to IgG and IgM secretion as well as IgE production. It is not expressed on resting peripheral T cells, B cells, NK cells, monocytes/macrophages, platelets and granulocytes.



Lysed normal whole blood sample.

CD279 (PD-1)

The CD279 antigen, also known as Programmed Death 1 (PD-1), belongs to the immunoglobulin superfamily. It contains an immunoreceptor tyrosine-based inhibitory motif (ITIM) in its cytoplasmic tail. It is encoded by the PDCD1 gene, which is located on the human chromosome 2q37.3. Immune cell function implicates important modulators known as cosignaling receptors. On T cells, the cosignaling receptors belong to either the immunoglobulin (CD28-like) or TNF receptor (TNFR) superfamilies. The CD28 immunoglobulin-superfamily is composed of coinhibitory and costimulatory receptors. Programmed Death-1 (PD-1) is one of the coinhibitory receptors, with notably Cytotoxic T Lymphocyte Antigen 4 (CTLA4) and CD272 (BTLA). The interaction of PD-1 with its ligands, PD-L1 and PD-L2, plays a critical role in regulating T cell activation and tolerance.



Lysed normal whole blood sample.

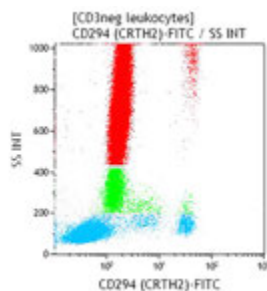
Clone: PD1.3			Isotype: IgG2b Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	B30634	Liquid	IOTest
PC5.5	0.5 mL	ASR	B36123	Liquid	IOTest
PC7	0.5 mL	ASR	A78885	Liquid	IOTest
APC	0.5 mL	ASR	B30633	Liquid	IOTest

Clone: ISA-3			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A49080	Liquid	IOTest
APC	0.5 mL	ASR	B36127	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD294 (CRTH2)

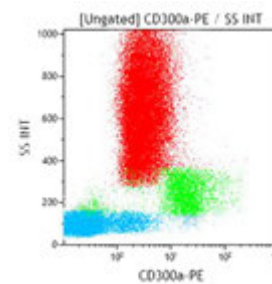
CD294, also known as CRTH2, is a seven-transmembrane G-protein-coupled receptor known as the chemoattractant receptor-homologous molecule expressed on Th2 cells. The deduced amino acid sequence of CRTH2 suggests two potential N-glycosylation sites at the first extracellular domain and a unique long cytoplasmic tail including four consensus sites for protein kinase C phosphorylation. Two G protein-coupled receptors, Prostaglandin D receptor (DP), and CRTH2 have been identified as receptors for Prostaglandin D2 (PGD2), but they differ in their signaling pathways. PGD2 is the major metabolite of arachidonic acid produced by allergen-activated mast cells and has been implicated in various allergic diseases as a proinflammatory lipid mediator. CRTH2 molecule is preferentially expressed on human T-helper (Th) 2 and T cytotoxic (Tc) 2 cells but not on Th1 and Tc1 cells. CRTH2 is the most reliable surface marker selectively associated with circulating T (Th and Tc) cells able to produce IL-4 (as well as IL-5 and IL-13) and not IFN γ . On normal whole blood leucocytes, CD294 is highly expressed on basophils and eosinophils, as well as Th2 and Tc2 cells. The expression of CD294 in peripheral blood mononuclear cells (PBMCs) is highly restricted to an activated state of Type 2 cells: i.e. CD25^{neg} T cells do not express CD294. CD294 may be expressed (weakly) on some monocytes and/or dendritic cells (CD14^{dim}, CD16^{pos}, HLA-DR^{pos}, CD33^{pos}). CD294 may act in mediating the recruitment and/or activation of basophils, eosinophils and Th2 cells at sites containing mast cells activated by invading allergens. CRTH2, but not DP, induces migration of Th2 cells, eosinophils and basophils in response to PGD2.



Lysed normal whole blood sample.
Gating on CD3 negative leukocytes.

CD300a (IRp60)

The CD300a, also known as inhibitory receptor protein (IRp60), is a surface molecule of 60kDa expressed by all human natural killer (NK) cells. The IRp60 gene, located on human chromosome region 17q25 encodes a molecule, highly O- and N-glycosylated, belonging to the immunoglobulin superfamily (Ig-SF) that displays one extracellular Ig-like domain of the V-type, a hydrophobic transmembrane portion and a cytoplasmic tail containing ITIM motifs involved in the inhibitory function. The ligand of the CD300a is still unknown but CD300a does not appear to recognize HLA-class I molecules. Upon cross-linking, IRp60 recruits and activates SH2-containing phosphatases SHP-1 and SHP-2 which switch off the activating signaling cascade by dephosphorylating a variety of tyrosine phosphorylated proteins. Cross-linking of IRp60 by E59.126 monoclonal antibody strongly inhibits the spontaneous cytotoxicity of NK cells as well as the NK-mediated cytolytic activity induced via different non-HLA-specific or HLA-specific activating receptors. CD300a may play a more general role in the regulation of the immune response since it is expressed on other cell types, including T lymphocyte subsets, monocytes and granulocytes.



Lysed normal whole blood sample.

Clone: E59.126			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	A22328	Liquid	IOTest

Clone: BM16 Isotype: IgG2a Rat

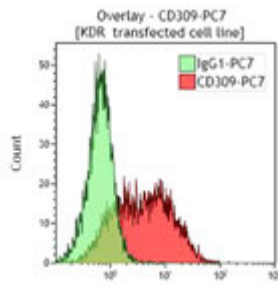
The BM16 monoclonal antibody precipitates a 55 to 70 kDa protein from cell lysates of CRTH2-transfected Jurkatt and Th2 clone, corresponding to PGD2 receptor.

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B42020	Liquid	IOTest
PE	100 tests	RUO	A07413	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD309 (KDR)

CD309 antigen, also called KDR (Kinase insert domain receptor), or flk-1 (Fetal liver kinase 1) belongs to the VEGF (vascular endothelial growth factor) receptor family. It is known as the VEGFR-2 and is one of the three cell signaling tyrosine-kinase receptors of the VEGF family [VEGFR-1 (flt-1), VEGFR-2 (KDR/flk-1), VEGFR-3 (flt-4)] and plays a key role in vascular development and regulation of vascular permeability. These receptors are transmembrane proteins that contain seven immunoglobulin-like domains in their extracellular part and two tyrosine kinase domain in their intracellular part. The KDR gene maps to the chromosome 4q11-q12. CD309 is the receptor for VEGF but it also binds VEGF-C, VEGF-D, and VEGF-E. Through the binding to CD309, which is expressed almost in endothelial cells, VEGF induces endothelial cell proliferation, and promotes cell migration. CD309 is expressed during early stages of embryogenesis. It has also been shown that VEGF can induce, in vivo, angiogenesis as well as permeabilization of blood vessels, and plays a central role in the regulation of vasculogenesis. It is expressed on CD34 positive cells defining a CD34⁺ CD309⁺ common precursor for both hematopoietic cells and endothelial cells called hemoangioblast.



KDR transfected Cell line.

Clone: KDR-1

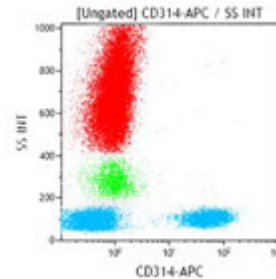
Isotype: IgG1 Mouse

The KDR-1 monoclonal antibody was assigned to the CD309 cluster of differentiation at the 8th International Workshop on Human Leucocyte Differentiation Antigens in Adelaide, Australia, in 2004.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A64615	Liquid	IOTest
PC7	1 mL	ASR	A64616	Liquid	IOTest

CD314 (NKG2D)

CD314, also known as NKG2D, is a 42 kDa type II transmembrane protein belonging to the C-type lectin superfamily. The name NKG2D may be misleading as it is not a typical NKG2 family member. It has low homology with the other members and dimerizes with itself to form a homodimer while other members dimerize with CD94. The surface expression of NKG2D requires association with a signaling adaptor protein, a KAP10 (DAP10) homodimer that contains a Y-x-x-M motif. Upon tyrosine phosphorylation, that motif recruits and activates phosphatidylinositol 3' (PI 3)-kinase. Unlike natural cytotoxicity receptors (NCRs), NKG2D is not only expressed by all NK cells but also by most $\gamma\delta$ T cells and by virtually all CD8 $\alpha\beta$ T cells. In addition, its expression can be up-regulated on NK cells by different cytokines (IL-15, IL-12 and IFN- γ). Human CD314 ligands identified so far are MICA and MICB, stress-inducible and broadly expressed molecules on tumors of epithelial origin, some melanomas, and ULBPs, targets of the human CMV protein, expressed on a wide range of cells. NKG2D triggering would appear to overrule the inhibitory signals delivered by the KIR and HLA class I interactions. NKG2D might play a complementary role in the NK-cell mediated lysis of target cells that appear to express HLA class I molecules normally and that express one or more NKG2D-specific ligands.



Lysed normal whole blood sample.

Clone: ON72

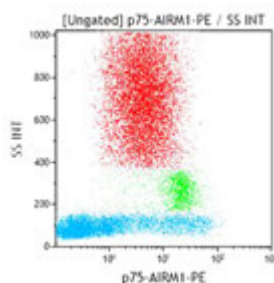
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	A08934	Liquid	IOTest
APC	0.5 mL	ASR	A22329	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD328 (p75 AIRM1)

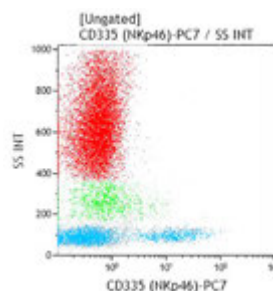
The p75 adhesion inhibitory receptor molecule 1 (p75/AIRM1), also known as Siglec-7, belongs to the CD33-related Siglec subgroup. p75 AIRM1 is a type I transmembrane glycoprotein, belonging to the immunoglobulin superfamily (Ig-SF) and sharing sequence homology with the sialic acids binding Ig-like lectins. The extracellular domain of the p75/AIRM1 molecule is relatively highly N-glycosylated and displays three extracellular Ig-like domains. The cytoplasmic tail is characterized by a classical ITIM motif responsible for the inhibitory functions of this receptor. p75 AIRM1 is expressed on activated and resting NK cells, monocytes, some chronic (CML) and acute myeloid leukemias (AML). p75 AIRM1 is a novel, HLA independent, inhibitory receptor that may play a relevant role in the negative regulation of human NK cell functions.



Lysed normal whole blood sample.

CD335 (NKp46)

CD335, also known as NKp46, is a 46-kDa transmembrane glycoprotein which is a NK-specific triggering receptor involved in non-MHC-restricted natural cytotoxicity and considered the prototype of the NK natural cytotoxicity receptors (NCRs). Its expression is restricted to all resting and activated NK cells, including the minor CD3⁺CD56^{bright}CD16⁻ subset. Although CD335 is highly expressed at the NK-cell surface in the majority of donors, some individuals have a proportion of NK cell (which vary up to 90%) expressing a "dull" NKp46 phenotype. CD335 is a member of the immunoglobulin superfamily characterized by two extracellular C2-type Ig-like domains. It is associated with the ITAM bearing molecules CD3 ζ and Fc ϵ RI γ . Although this association is likely to be essential for signal transduction via NKp46, CD3 ζ is not required for NKp46 surface expression. NKp46 represents a major activating receptor and plays a central role in the lysis and clearance of HLA class I⁺ cells. The magnitude of lysis correlates with its level of surface expression.



Lysed normal whole blood sample.

Clone: Z176

Isotype: IgG2b Mouse

Form	Size	Status	Part#	Format	Line
PE	50 tests	RUO	A22330	Liquid	IOTest

Clone: BAB281

Isotype: IgG1 Mouse

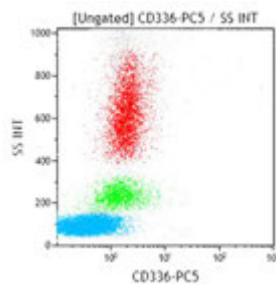
BAB 281-mediated masking of NKp46 molecule inhibits NK cytotoxicity versus different target cells. In redirected killing assays, BAB281 binding to NKp46 induces a strong increase of cytolytic activity. Although hemagglutinins of viral origins have been identified as ligands for NKp46 receptor, the natural (non-viral) ligand for NKp46 is unknown.

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3711	Liquid	IOTest
PC5	0.5 mL	ASR	A66902	Liquid	IOTest
PC7	0.5 mL	ASR	B38703	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

CD336 (NKp44)

CD336, also known as NKp44, is a 44-kDa transmembrane glycoprotein which is selectively expressed by activated NK cells. NKp44 functions as a triggering receptor involved in non-MHC-restricted natural cytotoxicity by activated NK cells and is one of the NK natural cytotoxicity receptors (NCRs). Structurally, CD336 is a member of the immunoglobulin superfamily characterized by a single extracellular V-type Ig-like domain. It associates with a homodimer of ITAM motif-containing KARAP / DAP12 adaptor proteins. These adaptor proteins were found to be crucial both for the surface expression of NKp44 and for transducing activating signal. CD336 can mediate triggering of NK cell cytotoxicity as in redirected killing assays. Monoclonal antibody Z231-mediated cross-linking of NKp44 in cloned NK cells resulted in strong lysis of target cells and, Z231-mediated masking of NKp44 partially inhibits cytolytic activity. Such inhibition is greatly increased if an anti-CD335, also known as anti-NKp46 (BAB281), is combined with Z231. The CD336 ligand is still undefined. Since activated NK cells selectively express NKp44, it may play a partial role in the enhanced cytotoxicity of IL2-activated compared to those freshly isolated NK cells from peripheral blood.

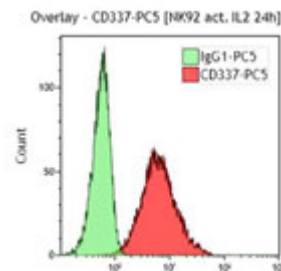


Lysed normal whole blood sample.

Clone: Z231			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3710	Liquid	IOTest
PC5	0.5 mL	ASR	A66903	Liquid	IOTest

CD337 (NKp30)

CD337, also known as NKp30, is a 30-kDa transmembrane glycoprotein which is a NK-specific triggering receptor involved in non-MHC-restricted natural cytotoxicity. NKp30 is strictly expressed by all resting and activated NK cells including the minor CD3⁺CD56^{bright}CD16⁻ subset. With NKp46 and NKp44 it is one of the three identified NK natural cytotoxicity receptors (NCR). Its surface expression parallels that of NKp46. NKp46^{dull} NK cells are also characterised by a NKp30^{dull} phenotype while NKp46^{bright} NK cells show a NKp30^{bright} phenotype. The NKp30^{bright} or NKp30^{dull} phenotypes are correlated with high or low cytotoxicity, respectively. CD337 is a member of the immunoglobulin superfamily characterized by a single extracellular V-type Ig-like domain. It is associated with a homodimer of ITAM motif-containing CD3 ζ adaptor proteins. These adaptor proteins are not necessary for surface expression of NKp30, but are necessary for signal transduction. In redirected killing assays, Z25-mediated cross linking of NKp30 induces strong NK cell activation. Conversely, Z25-mediated masking of NKp30 inhibits NK cytotoxicity against target cells. More importantly, CD337 represents the major receptor in induced NK-mediated killing of certain target cells, the lysis of which is largely NKp46 / NKp44 independent. Although the CD337 ligand is unknown, studies report NKp30-mediated lysis of immature dendritic cells (iDC). These findings suggest that DCs express one or more unidentified ligands for CD337.



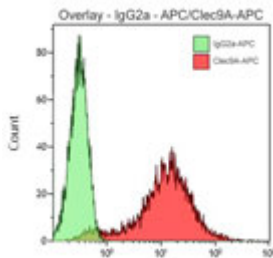
NK92 act. IL2 24h Cell line.

Clone: Z25			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3709	Liquid	IOTest
PC5	0.5 mL	ASR	A66904	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

Clec9A

CLEC9A is a group V C-type lectin receptor (CTLR) comprised of a single extracellular C-type lectin domain (CTLD) connected to the transmembrane domain by a stalk region and an intracellular cytoplasmic tail. In humans, CLEC9A is expressed on the cell surface of a subset of Dendritic cells (DCs) and a subset of CD14⁺CD16⁻ Monocytes. In dendritic cells, CLEC9A is selectively expressed on CD141⁺ (BDCA3⁺) dendritic cells. As opposed to other DC markers, CLEC9A presents the advantage of being expressed in both human and mouse DCs. Thus, it can serve as a DC marker crossing species barriers and may help in the translation from the mouse DC system to human immunobiology.

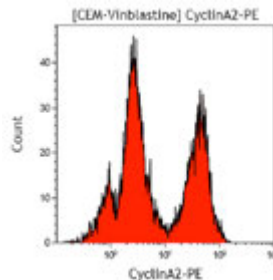


K562 Clec9A cell line.

Clone: 8F9		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
APC	0.5 mL	ASR	B43291	Liquid	IOTest

Cyclin A2

In humans, there are two A-type cyclins – an embryonic-specific cyclin A1 and a somatic cyclin A2. Cyclin A1 is only expressed in meiosis and very early embryos, whereas cyclin A2 is present in proliferating somatic cells. Cyclin A2 is a 48 kDa protein composed of 432 amino-acids. Cyclins control the activation of cyclin dependent kinases (CDKs) by associating with them to form a cyclin-CDK complex able to phosphorylate selected proteins and to induce downstream processes. The cyclin A2-CDK2 complex initiates DNA replication and is required for S phase progression. For passage through G2 to M phase, cyclin A2 complexes to the CDK1 (also called CDC2). Cyclin A2 is degraded via the ubiquitin-dependant proteolysis pathway in the early phases of mitosis.



Human lymphoid cell line (CEM) + Vinblastine.

Clone: 11B2G3			Isotype: IgG1 Mouse		
The 11B2G3 antibody reacts with human cyclin A2.					
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	A22327	Liquid	IOTest
PE	1 mL	ASR	B15092	Liquid	IOTest

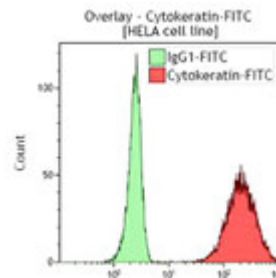
Cyclin D1

Cyclin D1, also called PRAD1/Cyclin D1, is a 36 kDa protein which regulates cyclin-dependent protein kinase activity in the G1 phase of the cell cycle.

Clone: 5D4		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.1 mL	RUO	IM1740	Liquid	-

Cytokeratin

Cytokeratins belong to the intermediate filament protein family and are characteristic of epithelial cells. At present, more than 20 different cytokeratins have been identified based on the original two dimensional gel electrophoresis classification. A sub classification, based on charge, divides cytokeratins into two subfamilies: the acidic (negatively charged) cytokeratin (type I) and the neutral to basic (positively charged) cytokeratin (type II). They are typically expressed as pairs, consisting of one acidic and one basic molecule.



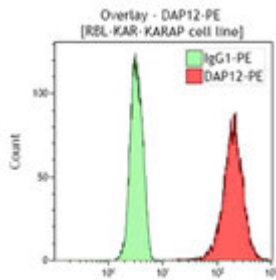
HELA Cell line.

Clone: J1B3			Isotype: IgG1 Mouse		
This monoclonal antibody exclusively reacts with cells of epithelial origin, and shows a cytoplasmic staining pattern.					
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM2356U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

DAP12 (DNAX / KARAP / TYROBP)

The DAP12 antigen (DNAX activating protein of 12 kDa) is a type I transmembrane glycoprotein which is also known as KARAP (killer cell activating receptor-associated protein) or TYROBP (tyrosine kinase binding protein). It is encoded by a gene located on the chromosome 19q13 and contains an intracytoplasmic immunoreceptor tyrosine-based activation motif (ITAM). The DAP12 antigen associates with a large family of receptors in hematopoietic cells conferring to this antigen a broad range of intracellular signaling functions. Interestingly, it has been shown to both potentiate or inhibit leukocytes activation. When associated with KIRs (stimulatory killer Ig-like receptors), the adaptor molecule DAP12 functions as an activation unit leading to the T cell activation. It has also been shown that the activation of the syk/ZAP70 tyrosine kinases by DAP12 plays a role in the stimulation of NK cells and T cells. On the contrary, the DAP12 association with other receptors such as Fc receptor γ -chain and CD3 ζ may lead to the regulation of T cell immune response.



RBL-KAR-KARAP Cell line.

Clone: H10E12F4

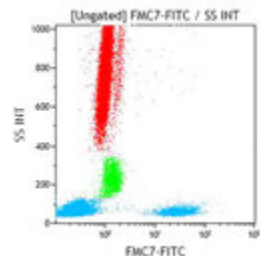
Isotype: IgG1 Rat

The H10E12F4 monoclonal antibody recognizes monocytes, neutrophils, dendritic cells, NK cells and to a lesser extent basophils, and B lymphocytes. It does not recognize CD4 and CD8 T cells or B cells.

Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A78886	Liquid	IOTest

FMC7 (CD20)

The recognized antigen is an epitope of the CD20 molecule. This antigen is only expressed by mature B lymphocytes.



Lysed normal whole blood sample.

Clone: FMC7

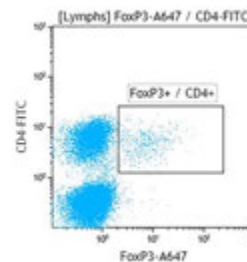
Isotype: IgM Mouse

The FMC7 antibody reacts with a subpopulation of peripheral blood B lymphocytes and tonsil B cells, but it does not react with granulocytes, monocytes, platelets, erythrocytes, T lymphocytes or null cells.

Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	A07791	Liquid	IOTest
FITC	1 mL	ASR	IM1364U	Liquid	IOTest
PB	0.5 mL	ASR	B08466	Liquid	IOTest

FoxP3

FoxP3 (Forkhead box protein P3, also known as Scurfin, JM2, or IPEX), is the major transcription factor that determines the fate and identity of CD4⁺ CD25⁺ Treg cells. It is constitutively expressed in natural Tregs (nTregs) and acts as the master regulator in nTreg development and suppressive function. nTreg (CD4⁺ CD25⁺ FoxP3⁺ Treg cells) are important regulators of almost all immune responses, and they mediate suppressive functions both through the production of cytokines and direct cell-cell contacts. nTreg cells exit in the thymus, circulate and migrate to secondary lymphoid tissues, as well as to inflammatory sites, to exert suppressor activities. FoxP3 expression can also be directly induced in peripheral naive CD4⁺ CD25⁻ T cells, forming inducible Treg (iTreg) cells that also suppress immune responses. Diminished Treg cell development and function has been linked to auto-immunity and allergy whereas elevated Treg cell responses might play a role in undermining anti-infectious and anti-cancer immunity. FoxP3 contains 3 discernible functional domains, a single C2H2 zinc-finger motif, a leucinezipper-like motif, and a C-terminal forkhead domain, thereby exerting its positive and negative function as transcription factor. FoxP3 acts as transcriptional activator for genes that are typically up-regulated in nTregs while it represses transcription of both Th1 and Th2 cytokines in nTregs. FoxP3 can also exert regulatory capacity via protein-protein interactions.



Permeabilized normal whole blood sample. Gating on lymphocytes. Dual staining with CD4-FITC and FoxP3-A647.

Clone: 259D

Isotype: IgG1 Mouse

The monoclonal antibody 259D detects endogenous levels of human FoxP3 transcription factor.

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	B46031	Liquid	IOTest
PC7	0.5 mL	ASR	B46032	Liquid	IOTest
AF647	0.5 mL	ASR	B30650	Liquid	IOTest

HIV-1 core antigen

Clone: KC57

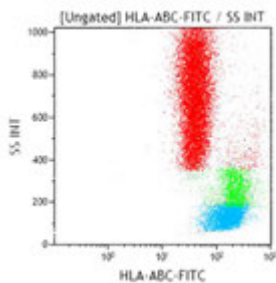
Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
FITC	100 tests	RUO	6604665	Liquid	COULTER CLONE
RD1	100 tests	RUO	6604667	Liquid	COULTER CLONE

SINGLE-COLOR LIQUID REAGENTS

HLA-ABC

HLA-A, -B, and -C are major histocompatibility complex (MHC)-class I antigens. Like other class I molecules (i.e. HLA-E, -F, -G), HLA-A, -B, and -C are heterodimers consisting of a 40 – 45 kDa transmembrane glycoprotein α -chain, noncovalently combined to the invariant β 2-microglobulin. All class I molecules have conserved, monomorphic domains, but are also characterized by their extensive degree of allelic polymorphism. MHC molecules play a central role in the immune response. They are involved in the maturation of T cell repertoire, in the activation of T lymphocytes by presentation of xenogenic peptides or in the allogenic response. HLA-A, -B and -C are "classical" MHC Class I molecules and are expressed on the surface of most nucleated human cell types.



Lysed normal whole blood sample.

Clone: B9.12.1		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0107	Freeze-dried	-
FITC	2 mL	ASR	IM1838U	Liquid	IOTest

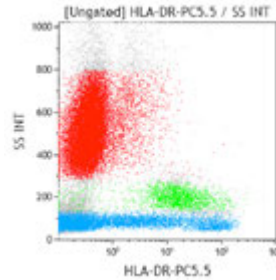
HLA-DQ

The HLA (Human Leucocyte Antigen) system is the name given to the major histocompatibility complex (MHC) in man. The MHC complex is located on the short arm of the chromosome 6 and encodes three groups of molecules designated MHC class I, class II and class III. Coded by 5 loci (DM, DO, DP, DQ and DR) of the D locus, HLA class II molecules are also called HLA-DM, HLA-DO, HLA-DP, HLA-DQ and HLA-DR antigens. The HLA class II molecules like class I molecules, are composed of non-covalently associated α/β heterodimers. On HLA class II, both heavy (α) and light (β) chain with a molecular weight of 31-33 kDa and 26-29 kDa respectively span the cell membrane. The two immunoglobulin-like domains proximal to the cell membrane (α 2 and β 2) support the two polymorphic amino-terminal domains (α 1 and β 1) distal to the membrane which constitute a part of the "antigen presenting site". HLA class II molecules are involved in the regulation of immune response whose expression is limited to antigen presenting cells, i. e. B lymphocytes, monocytes / macrophages, dendritic and Langerhans cells of the skin.

Clone: SPVL3		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	RUO	IM0416	Freeze-dried	-

HLA-DR

HLA-DR molecules are found on antigen-presenting cells (APC), i.e. dendritic cells, B lymphocytes, monocytes, macrophages, and thymic epithelial cells. They are also expressed on activated T cells, but not on granulocytes, platelets, or red blood cells. Resting T cells or endothelial cells that do not normally express these molecules can be induced to express them.



Lysed normal whole blood sample.

Clone: B8.12.2		Isotype: IgG2b Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM0463U	Liquid	IOTest
PE	2 mL	ASR	IM0464U	Liquid	IOTest

Clone: Immu-357		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM1638U	Liquid	IOTest
PE	100 tests	CE	IM1639	Liquid	IOTest
PE	2 mL	ASR	IM1639U	Liquid	IOTest
ECD	1 mL	ASR	IM3636	Liquid	IOTest
PC5	100 tests	CE	A07793	Liquid	IOTest
PC5	1 mL	ASR	IM2659U	Liquid	IOTest
PC5.5	0.5 mL	ASR	B20024	Liquid	IOTest
PC7	0.5 mL	ASR	A40579	Liquid	IOTest
APC	1 mL	ASR	IM3635	Liquid	IOTest
APC-A750	0.5 mL	ASR	B42021	Liquid	IOTest
PB	0.5 mL	ASR	A74781	Liquid	IOTest
PB	50 tests	CE	B36291	Liquid	IOTest
KrO	0.5 mL	ASR	B00070	Liquid	IOTest

HLA-DR, DP, DQ

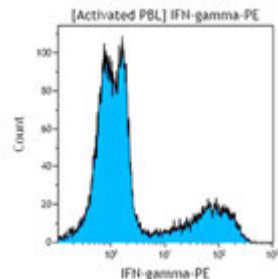
The recognized epitope is specific to a non-polymorphic HLA class II (DR, DP, DQ) Ia antigen constituted of α and β polypeptides of 34 and 29 kDa respectively. This antigen is expressed on monocytes, macrophages, B lymphocytes and activated T lymphocytes.

Clone: 9-49 (I3)		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
FITC	0.5 mg	ASR	6603424	Freeze-dried	COULTER CLONE
RD1	0.5 mL	ASR	6604366	Liquid	CYTO-STAT

SINGLE-COLOR LIQUID REAGENTS

IFN- γ

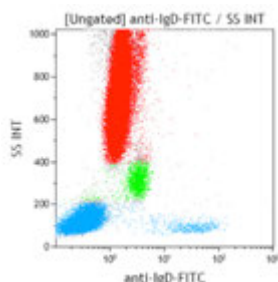
Human Interferon- γ (IFN- γ) is a 20-25 kDa (monomer) pleiotrophic cytokine that is produced by activated T cells and NK cells and is involved in the regulation of almost all immune and inflammatory responses. IFN- γ is involved in the activation, growth and differentiation of T cells, B cells, macrophages, NK cells as well as other cell types. IFN- γ enhances MHC expression on antigen-presenting cells including epithelial, endothelial and connective tissue cell and monocytes cell lines. It also has weak antiviral activity and acts as a macrophage-activating factor (MAF) for tumor cytotoxicity leading to anti-tumor effects.



Activated peripheral blood lymphocytes (PBL).

Clone: 45.15		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	IM2716U	Liquid	IOTest
PE	2 mL	ASR	IM2717U	Liquid	IOTest
PB	0.5 mL	ASR	B46034	Liquid	IOTest

IgD



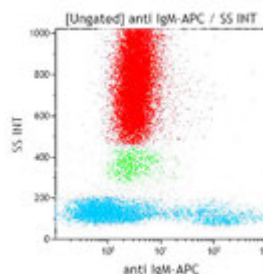
Pre-washed lysed normal whole blood sample.

Clone: IA6-2		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
FITC	50 tests	RUO	B30652	Liquid	IOTest
PE	50 tests	RUO	B30653	Liquid	IOTest
APC	50 tests	RUO	B30651	Liquid	IOTest

IgE (D ϵ 2)

Clone: E124.2.8			Isotype: IgG1 Mouse		
The E124.2.8 antibody recognizes the Dε2 constant region of human IgE.					
Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	A40174	Freeze-dried	-

IgM

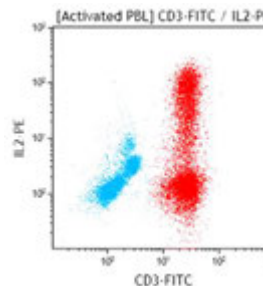


Pre-washed lysed normal whole blood sample.

Clone: SA-DA4		Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line
FITC	50 tests	RUO	B30655	Liquid	IOTest
PE	50 tests	RUO	B30657	Liquid	IOTest
APC	50 tests	RUO	B30654	Liquid	IOTest
PB	50 tests	RUO	B30656	Liquid	IOTest

IL-2

Interleukin-2 (IL-2) is a 15-17 kDa cytokine produced and secreted by T cells. The induction of IL-2 secretion is the first step in T cell activation. IL-2 is the major autocrine growth factor for activated T cells and is obligatory for the generation of cytotoxic T cells. IL-2 also promotes the proliferation and the differentiation of NK precursors, B cells and monocytes. Activated CD4⁺ T cells of the Th1 phenotype produce predominantly IL-2 and Interferon- γ , whereas CD4⁺ T cells of the Th2 phenotype produce IL-4 and IL-10.



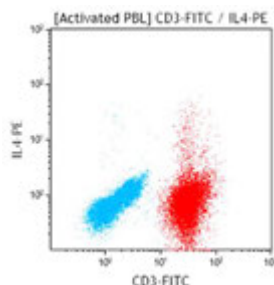
Activated peripheral blood lymphocytes (PBL).

Clone: N7.48A		Isotype: IgG2a Mouse			
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2718U	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

IL-4

Interleukin-4 (IL-4) is a monomeric 20 kDa predominantly produced by activated T lymphocytes of the Th2 phenotype, by mast cells and by some antigen-presenting cells. Together with IL-2, IL-4 is an autocrine growth factor for activated T cells and for cytotoxic T cell precursors. IL-4 is a major factor involved in the activation of resting B lymphocytes. Together with IL-13, IL-4 induces isotype switch towards IgE and IgG1 isotypes. Activated CD4⁺ T cells of the Th1 phenotype produce predominantly IL-2 and Interferon γ , whereas CD4⁺ T cells of the Th2 phenotype produce IL-4, IL-5, IL6 and IL-10.

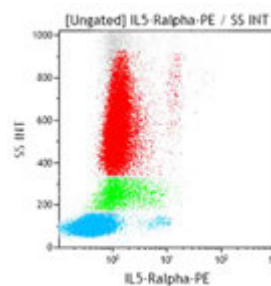


Activated peripheral blood lymphocytes (PBL).

Clone: 4D9			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2719U	Liquid	IOTest

IL-5R α

This monoclonal antibody detects the α chain of the IL-5 receptor (IL-5R α). The α chain associates with a β chain (CD131) to form the high affinity IL-5 receptor. This β chain is shared with the IL-3 and GM-CSF receptors. In contrast to the related IL-3 and GM-CSF receptor α chains, IL-5R α is eosinophil and basophil specific. Eosinophil and basophil precursors express IL-5R α . Neutrophils, monocytes and lymphocytes do not express IL-5R α . IL-5, with IL-3 and GM-CSF cytokines, are involved in recruiting and acting on eosinophils and basophils, the major cell populations implicated in allergy, parasitic infections and asthma. Asthma is characterized by airway inflammation and is associated with tissue eosinophilia in the lung through chemotactic and cell adhesion mechanisms. Inflammation is a beneficial key element of the innate immune system in response to infection or local injury or trauma. But when its normal regulatory mechanisms are disturbed, chronic inflammatory diseases appear. It has been proposed that cytokine stimulation of eosinophil survival in the airways of asthmatics is a contributing factor of the pathology of the disease. A better understanding of the signaling component involved in eosinophil survival may provide new targets for the treatment of asthma.



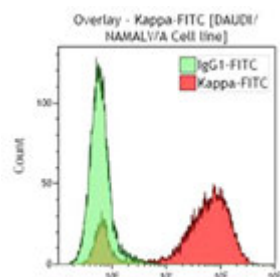
Lysed normal whole blood sample.

Clone: H17N			Isotype: IgG1 Mouse		
The H17N monoclonal antibody does not block the binding of IL-5 to its receptor.					
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A31894	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

κ Chain

The Kappa light chain of the cell surface immunoglobulins is expressed on a subset of 50% of normal human peripheral mature B lymphocytes and on a subset of bone marrow immature B cells.

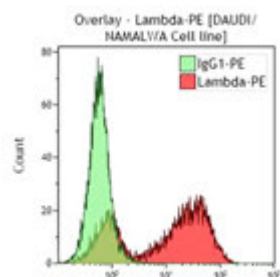


DAUDI / NAMALWA Cell line.

Clone: Polyclonal			Isotype: F(ab') ₂ Rabbit		
Form	Size	Status	Part#	Format	Line
FITC	2 mL	ASR	A64828	Liquid	IOTest

λ Chain

The Lambda light chain of immunoglobulins is expressed at the surface of a cellular sub-population corresponding to approximately 1/3 of mature B lymphocytes in peripheral blood. This light chain is also found on the surface of a sub-population of immature bone marrow B lymphocytes.

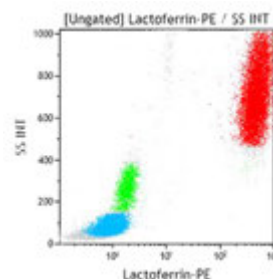


DAUDI / NAMALWA Cell line.

Clone: Polyclonal			Isotype: F(ab') ₂ Rabbit		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	A64827	Liquid	IOTest

Lactoferrin

Lactoferrin is a 76 kDa single chain polypeptide with iron-binding property. This protein shows structural similarity to the plasma iron-transport protein transferrin. Lactoferrin is involved in various immuno-regulatory functions associated with anti-infective and inflammatory responses such as antibody synthesis, cytokine production, NK cell cytotoxicity, complement activation and lymphocyte proliferation. Lactoferrin synthesis occurs at the myelocytic stage during polymorphonuclear neutrophil (PMN) ontogeny and constitutes a component of secondary (or specific) granules. Unlike the myeloperoxidase, lactoferrin is absent from primary (or azurophilic) granules and appears later during maturation of the granulocytic lineage. Thus, in peripheral blood, intracellular lactoferrin expression is restricted to neutrophils.

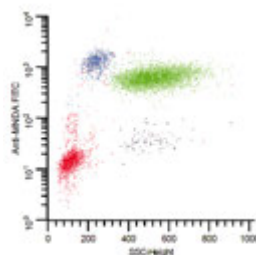


Lysed normal whole blood sample.

Clone: CLB13.17			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2742	Liquid	IOTest

MNDA

The myeloid cell nuclear differentiation antigen (MNDA) is expressed only in myelomonocytic and a subset of B lymphoid hematopoietic cells. Most applications will require permeabilization or solubilization of cell membranes, as the primary cell localization of this protein is intranuclear. It is uniformly distributed throughout the interphase cell nucleus and associates with chromatin, but does not bind specific DNA sequences. MNDA has been characterized as a cofactor in regulation of cell cycle progression, cell differentiation and apoptosis. It is a member of the interferon-alpha inducible protein family and accordingly has been reported to be altered in a variety of inflammatory related disease states. Expression is disproportionately consistent in the marginal zone lymphoproliferative disorders subset of malignant lymphoma. Expression is reported to be decreased in myelodysplasia in myeloid precursors and mature forms.



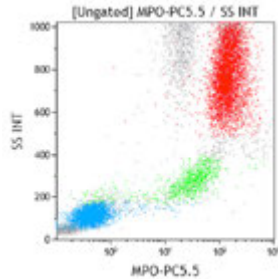
Permeabilized normal whole blood sample.

Clone: 3C1				Isotype: IgG1 Rat	
A product from Trillium Diagnostics, LLC.					
Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B17495	Liquid	-

SINGLE-COLOR LIQUID REAGENTS

Myeloperoxidase

Myeloperoxidase (MPO) is an $\alpha\beta 2$ heteromultimer with α and β subunits of 55 and 15 kDa respectively. It is expressed intracellularly in the azurophilic granules of neutrophils. It is not expressed in lymphocytes, megakaryocytes, or in erythrocytes.

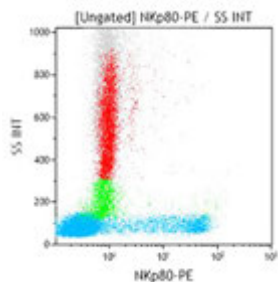


Permeabilized normal whole blood sample.

Clone: CLB-MPO-1			Isotype: IgG2a Mouse		
Form	Size	Status	Part#	Format	Line
FITC	100 tests	CE	IM1874	Liquid	IOTest
FITC	2 mL	ASR	IM1874U	Liquid	IOTest
PE	2 mL	ASR	IM3455U	Liquid	IOTest
PE	100 tests	CE	B36288	Liquid	IOTest
PC5.5	0.5 mL	ASR	B23132	Liquid	IOTest

NKp80

The NKp80, also known as killer cell lectin-like subfamily F, member 1 (KLRF1) is a type II transmembrane glycoprotein of 80 kDa and 40 kDa under reducing conditions. It is expressed on NK cells and a subset of T lymphocytes whereas it is not expressed on B lymphocytes, monocytes and granulocytes. The NKp80 antigen is a 231 amino acid protein which belongs to the C-lectin family and is encoded by a gene located on chromosome 12. It is characterized, in its 169 amino acid extracellular domain by 4 glycosylation sites and by two tyrosine residues in its 39 amino acid cytoplasmic domain. The transmembrane domain contains 23 amino acids. The NKp80 molecule binds to the genetically linked receptor AICL which is up-regulated by Toll-like receptor stimulation. NKp80-AICL interaction regulates the immune responses at sites of inflammation by stimulating the release of proinflammatory cytokines.

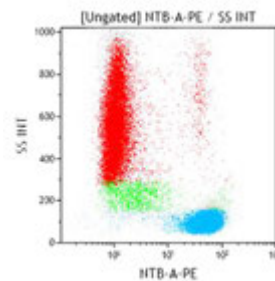


Lysed normal whole blood sample.

Clone: MA152			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	A52635	Liquid	IOTest

NTB-A

The natural killer (NK), T lymphocyte, B lymphocyte antigen (NTB-A) is a 60-kDa transmembrane glycoprotein of the CD2 family expressed on all human resting and activated NK, T and B cells. This antigen is not expressed on monocytes, neutrophils, and basophils but is expressed on eosinophils. The NTB-A antigen, a 331 amino acid protein, is a member of the immunoglobulin (Ig) superfamily. It is characterized, in its 225 amino acid extracellular domain, by one distal V-type domain without disulfide bond and two proximal C2-type domains, and in its 83 amino acid cytoplasmic domain by three tyrosine residues. One tyrosine residue is part of an ITIM motif and two are parts of an ITSM motif (TxYxxV/I). NTB-A is its own ligand through an homophilic binding. NTB-A associates with two adaptor proteins, the SLAM-associated protein (SAP) also known as SH2D1A and the Ewing's sarcoma activated transcript (EAT) 2. In NK cells, NTB-A acts as an activating coreceptor.



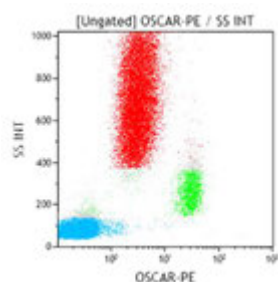
Lysed normal whole blood sample.

Clone: MA127			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A40926	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

OSCAR

OSCAR, an abbreviation of osteoclast-associated receptor, is a new member of the leukocyte receptor complex. Human OSCAR is a cell-surface, monomeric N-glycosylated protein of approximately 45 kDa. The amino acid sequence shows homology with that of members of the KIR family. The protein exhibits two C2-type immunoglobulin extracellular domains, a transmembrane section that contains a positively charged arginine residue, and a short intracytoplasmic tail with no recognizable signaling motif. As suggested by the presence of the charged residue, OSCAR associates with the ITAM-adaptor FcRγ and not with other signaling molecules. The gene coding for OSCAR has been mapped to chromosome 19q13. Unlike mouse OSCAR, human OSCAR is widely expressed in cells of the myeloid lineage, and in particular, at all stages of dendritic cell (DC) differentiation and maturation. T cells, B cells, and NK cells do not express OSCAR. OSCAR is involved in antigen presentation and activation of human DCs. It allows processing and presentation of exogenous antigens.

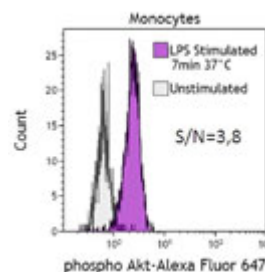


Lysed normal whole blood sample.

Clone: 11.1CN5			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	100 tests	RUO	A24987	Liquid	IOTest

Phospho-Akt (Ser473)

Akt, also referred to as PKB or Rac, plays a critical role in controlling survival and apoptosis. This protein kinase is activated by insulin and various growth and survival factors to function in a wortmannin-sensitive pathway involving PI3 kinase. Akt is activated by phospholipid binding and activation loop phosphorylation at Thr308 by PDK1 and by phosphorylation within the carboxy terminus at Ser473. The previously elusive PDK2 responsible for phosphorylation of Akt at Ser473 has been identified as mammalian target of rapamycin (mTOR) in a rapamycin-insensitive complex with rictor and Sin1. Akt promotes cell survival by inhibiting apoptosis by phosphorylating and inactivating several targets, including Bad, forkhead transcription factors, c-Raf and caspase-9. PTEN phosphatase is a major negative regulator of the PI3 kinase/Akt signaling pathway. LY294002 is a specific PI3 kinase inhibitor. Another essential Akt function is the regulation of glycogen synthesis through phosphorylation and inactivation of GSK-3α and β. Akt may also play a role in insulin stimulation of glucose transport. In addition to its role in survival and glycogen synthesis, Akt is involved in cell cycle regulation by preventing GSK-3β mediated phosphorylation and degradation of cyclin D1 and by negatively regulating the cyclin dependent kinase inhibitors p27 Kip and p21 Waf1/CIP1. Akt also plays a critical role in cell growth by directly phosphorylating mTOR in a rapamycin-sensitive complex containing raptor.



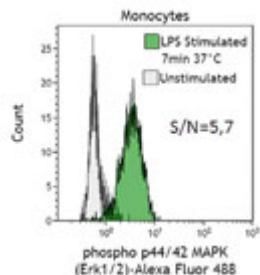
Flow Cytometric analysis of normal whole blood, gated on monocytes, non stimulated (grey) or treated with LPS 7 min at 37°C (purple) using Phospho-Akt (Ser473) A647 with PerFix EXPOSE kit procedure.

Clone: D9E			Isotype: IgG Rabbit		
Detects endogenous levels of Akt only when phosphorylated at Ser473. Cross reacts with human, mouse and rat Phospho-Akt protein.					
Form	Size	Status	Part#	Format	Line
AF647	25 tests	RUO	B23138	Liquid	Cell Lab SC

SINGLE-COLOR LIQUID REAGENTS

Phospho-Erk1/2 (Thr202/Tyr204)

Both Erk1 and Erk2 (p44 and p42 MAP kinases) function in a protein kinase cascade that plays a critical role in the regulation of cell growth and differentiation. MAP kinases are activated by a wide variety of extracellular signals including growth and neurotrophic factors, cytokines, hormones and neurotransmitters. Activation of MAP kinases occurs through phosphorylation of threonine and tyrosine (202 and 204 of human MAP kinase or 183 and 185 of rat MAP kinase) at the sequence T*EY* by a single upstream MAP kinase kinase (MEK). Both kinases are known to weakly autophosphorylate on tyrosine.



Flow Cytometric analysis of normal whole blood, gated on monocytes, non stimulated (grey) or treated with LPS 7 min at 37°C (green) using Phospho-Erk1/2 (Thr202/Tyr204) A488 with PerFix EXPOSE kit procedure.

Clone: E10

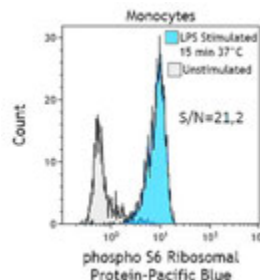
Isotype: IgG1 Mouse

Detects endogenous levels of p44 and p42 MAP kinase (Erk1 and Erk2) when dually phosphorylated at Thr202 and Tyr204. This antibody does not cross-react with the corresponding phosphorylated residues of either SAPK/JNK or p38 MAP kinase.

Form	Size	Status	Part#	Format	Line
AF488	25 tests	RUO	B23137	Liquid	Cell Lab SC

Phospho-S6 Ribosomal Protein (Ser235/236)

S6 ribosomal protein is a component of the 40S ribosomal subunit. It is involved in mRNA translation upregulation. S6 ribosomal protein activation may be mediated by members of PI3K-PKB/Akt/mTORC1 signaling pathways. The first component of this pathway consists of surface receptors for growth factors such as mitogens, growth factors, and cytokines. These receptors undergo tyrosine phosphorylation in their intracellular domains following binding with their respective ligands. Activated receptor tyrosine kinases can then activate ras proteins, which in turn activate divergent downstream signaling pathways including Mitogen-Activated Protein Kinases (MAPK). MAPK cascades are key signaling pathways involved in the regulation of normal cell proliferation, survival and differentiation. Phosphorylation of the S6 ribosomal protein is induced by the activated p70 S6 MAPK. Phosphorylation of S6 ribosomal protein correlates with an increase in mRNA transcripts translation containing an oligopyrimidine tract in their 5' untranslated regions. These 5'TOP mRNA transcripts encode proteins involved in cell cycle progression as well as ribosomal proteins and elongation factors necessary for translation. Phosphorylation sites in S6 ribosomal protein include the Ser235, Ser236, Ser240 and Ser244 residues.



Flow Cytometric analysis of EDTA normal whole blood gated on Monocytes, non treated (grey) or treated with LPS 15 min at 37°C (blue), using Phospho-S6 Ribosomal Protein (Ser235/SER236) Pacific Blue with PerFix EXPOSE kit procedure.

Clone: D57.2.2E

Isotype: IgG Rabbit

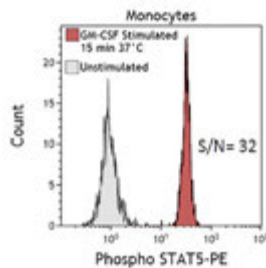
Detects endogenous levels of ribosomal protein S6 only when phosphorylated at Ser235 and 236. Cross reacts with human, mouse, rat, monkey and s. cerevisiae.

Form	Size	Status	Part#	Format	Line
PB	25 tests	RUO	B23136	Liquid	Cell Lab SC

SINGLE-COLOR LIQUID REAGENTS

Phospho-Stat5 (Tyr694)

Signal transducers and activators of transcription (STATs) is a group of transcription factors. They play a critical role in diverse signal transduction pathways that govern cellular survival, proliferation, differentiation and apoptosis. They mediate signaling from a number of membrane receptors that include interferon, interleukin (IL-2), hematopoietic and growth factors receptors (GM-CSF, growth hormone and prolactin). Stat5 signals can be detected in GM-CSF stimulated monocytes as opposed to non activated control samples. Phosphorylation at Tyr694 is obligatory for Stat5 activation. STAT protein activation may be mediated by members of both JAK and Src family members following cytokine/growth factor stimulation. JAK kinases appear to be essential for the phosphorylation of the cytokine receptors which results in the creation of docking sites on the receptors for binding of SH2-containing proteins such as STATs, Src-kinases and other signaling intermediates. The integration of these diverse signaling cues from active JAK kinases, members of the Src-family kinases and STAT proteins, leads to cell proliferation, cell survival and differentiation, the end-point of the cytokine/growth factor stimulus. STAT protein activation has been observed in diverse cell types. Constitutive STAT activation has been detected in a wide variety of human primary tumor specimens and tumor cell lines. Stat5 is constitutively active in some leukemic cell types. Phosphorylated Stat5 is found in some endothelial cells treated with IL-3, which suggests its involvement in angiogenesis and cell motility.

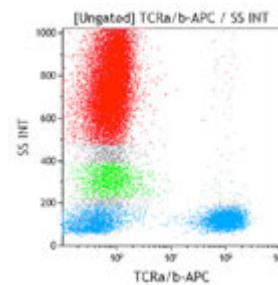


Flow Cytometric analysis of EDTA normal whole blood, gated on Monocytes, non treated (gray) or treated with GM-CSF 15 min at 37°C (red), using Phospho-Stat5 (Tyr694) PE with PerFix EXPOSE kit procedure.

Clone: C71E5			Isotype: IgG1 Rabbit			
Form	Size	Status	Part#	Format	Line	
PE	25 tests	RUO	B23139	Liquid	Cell Lab SC	

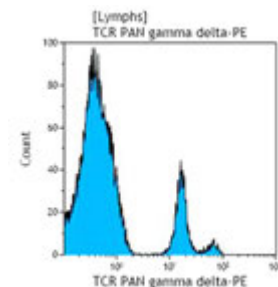
TCR PAN α/β

Human T cells recognize foreign antigens, in the context of host HLA molecules through the T-cell receptor for antigen (TcR). The TcRs are molecular complexes which comprise two units: a recognition unit, composed of either α - β or γ - δ heterodimer, which are present on the cell surface in a mutually exclusive manner, and, a transducing unit, the CD3 complex, common to α - β and γ - δ heterodimers, which triggers the T cell when the recognition unit is occupied by the antigen. The recognition units recognize any possible foreign antigen and the diversity necessary for this function of recognition is generated by somatic recombination the TcR genes. There are four TcR gene loci (α , β , γ and δ). Each of them is composed of several V (for variable) segments, coding for about 90 amino acids, very short D (for diversity) segments (α and δ loci only), and short J (for joining) segments (about 15 amino acids), and one or two C (for constant) segments.



Lysed normal whole blood sample.

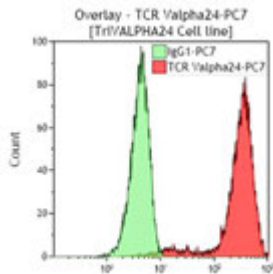
Clone: IP26A			Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line	
PE	1 mL	ASR	A39499	Liquid	IOTest	
PC5	0.5 mL	ASR	A39500	Liquid	IOTest	
APC	0.5 mL	ASR	B13981	Liquid	IOTest	

TCR PAN γ/δ 

Lysed normal whole blood sample.

Clone: IMMU510			Isotype: IgG1 Mouse			
Form	Size	Status	Part#	Format	Line	
UNLB	0.1 mg	RUO	IM1349	Freeze-dried	-	
FITC	1 mL	ASR	IM1571U	Liquid	IOTest	
PE	1 mL	ASR	IM1418U	Liquid	IOTest	
PC5	50 tests	CE	IM2662	Liquid	IOTest	
PC5	0.5 mL	ASR	IM2662U	Liquid	IOTest	
PC5.5	0.5 mL	ASR	A99021	Liquid	IOTest	
PC7	0.5 mL	ASR	B10247	Liquid	IOTest	

SINGLE-COLOR LIQUID REAGENTS

TCR V α 24

Tri VAlpha24 Cell line.

Clone: C15

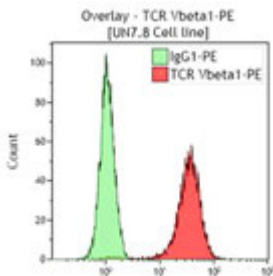
Isotype: IgG1 Mouse

The C15 antibody recognizes the IGRa02 sequence, the only described member of this family. It stains from 0.4% to 1% of peripheral CD3⁺ cells from normal blood. An invariant V α 24/V β 11 T cell receptor is expressed in all individuals by clonally expanded CD4⁺ CD8⁺ T cells, reactive to bacterial antigens. This unique lymphocyte population restricted by the CD1d molecule recognition has been identified as the natural killer T (NKT) cells. The IGRa02 sequence is also referred to as TRAV10 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1589	Liquid	IOTest
PE	1 mL	ASR	IM2283	Liquid	IOTest
PC7	0.5 mL	ASR	A66907	Liquid	IOTest

TCR V β 1

Also called TCRBV1S1 and S2



UN7.8 Cell line.

Clone: BL37.2

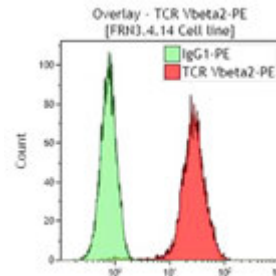
Isotype: IgG1 Rat

V β 1 is the human variable β 1 chain of the T cell receptor. The BL37.2 antibody recognizes both V β 1.1 and V β 1.2 allele products (HBVT73 cDNA and 46W/Q cDNA, respectively). None of the other V β specific antibodies from the TCR Workshop (San Francisco, CA, 1995) gave significant staining on the sorted cell lines. This antibody stains approximately 6% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV9 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM2219	Freeze-dried	-
FITC	1 mL	ASR	IM2406	Liquid	IOTest
PE	1 mL	ASR	IM2355	Liquid	IOTest

TCR V β 2

Also called TCRBV2S1



FRN3.4.14. Cell line.

Clone: MPB2D5

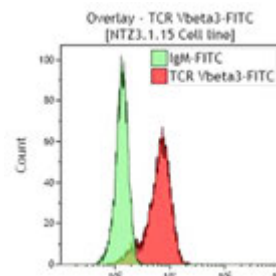
Isotype: IgG1 Mouse

V β 2 is the human variable β 2 chain of the T cell receptor. The MPB2D5 antibody recognizes all the members (Molt4 identical to PL2.13, PH34 and TCRBV2S13 sequences) of the V β 2 subfamily that are in fact alleles. It stains approximately 10% of peripheral CD3⁺ cells in normal blood. V β 2 is the target of Toxic Shock Syndrome Toxin 1 (TSST1). This sequence is also referred to as TRBV20-1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM2006	Freeze-dried	-
Biot	0.1 mg	RUO	IM2081	Freeze-dried	-
FITC	1 mL	ASR	IM2407	Liquid	IOTest
PE	1 mL	ASR	IM2213	Liquid	IOTest

TCR V β 3

Also called TCRBV3S1



NTZ3.1.15 Cell line.

Clone: CH92

Isotype: IgM Mouse

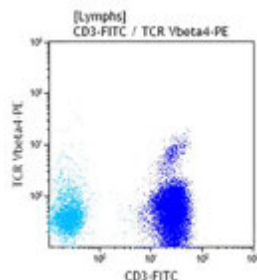
V β 3 is the human variable β 3 chain of the T cell receptor. The CH92 antibody recognizes the unique member of the V β 3 subfamily (PL4.4 identical to HBVT22 sequences). CH92 antibody recognizes the major subset of V β 3 cells. V β 3 is the target of Staphylococcal Enterotoxin B (SEB) superantigen. This sequence is also referred to as TRBV28 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM2372	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR Vβ4

Also called TCRBV4



Lysed normal whole blood sample.
Gating on lymphocytes. Dual staining
with CD3-FITC

Clone: WJF24

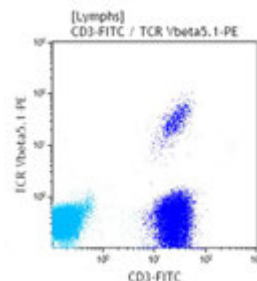
Isotype: IgM Rat

The WJF24 antibody recognizes the Vβ allele product. This antibody stains from 0.8% to 3.3% (mean 1.9%) of peripheral CD3-positive lymphocytes in normal blood. This sequence is also referred to as TRBV29-1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B07084	Liquid	IOTest
PE	1 mL	ASR	IM3602	Liquid	IOTest

TCR Vβ5.1

Also called TCRBV5S1



Lysed normal whole blood sample.
Gating on lymphocytes. Dual staining
with CD3-FITC.

Clone: IMMU 157

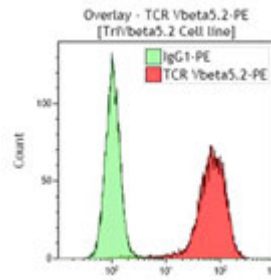
Isotype: IgG2a Mouse

Vβ5 is a multimembered subfamily of the T cell receptor. Immu157 recognizes the Vβ5.1 (HBP51 sequence) member of this subfamily. Vβ5.2 and Vβ5.3 (PL25 and 12A1 sequences) are not recognized. Recognition of other members of the Vβ5 subfamily has not been found, but cannot be formally excluded. This antibody stains from 4.2% to 7.2% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV5-1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM1551	Freeze-dried	-
FITC	1 mL	ASR	IM1552	Liquid	IOTest
PE	1 mL	ASR	IM2285	Liquid	IOTest

TCR Vβ5.2

Also called TCRBV5S2



Tri Vbeta 5.2-PE Cell line.

Clone: 36213

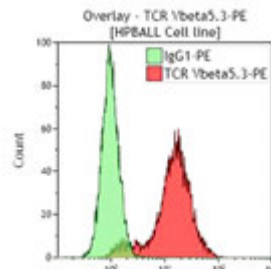
Isotype: IgG1 Mouse

The 36213 antibody recognizes the PL25 sequence. Vβ5.1 (HBP51 sequence) and Vβ5.3 (IGRb08 sequence) are not recognized. Recognition of other members of the Vβ5 subfamily has not been found, but cannot be formally excluded. 36213 stains from 0.5% to 1.5% (mean 0.8%) of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV5-6 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1482	Liquid	IOTest
PE	1 mL	ASR	IM2286	Liquid	IOTest

TCR Vβ5.3

Also called TCRBV5S3



HPBALL Cell line.

Clone: 3D11

Isotype: IgG1 Mouse

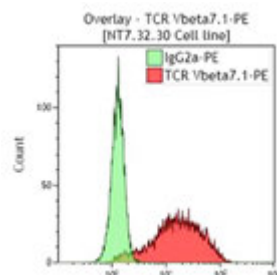
The 3D11 antibody recognizes the IGRb08 sequence. Vβ5.1 and Vβ5.2 (HBP51 and PL25 sequences) are not recognized. Reactivity on other members of the Vβ5 subfamily has not been found, but cannot be formally excluded. It stains from 1% to 1.8% (mean 1.4%) of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV5-5 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM2002	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR Vβ7.1

Also called TCRBV7S1 and S2



NT7.32.30 Cell line.

Clone: ZOE

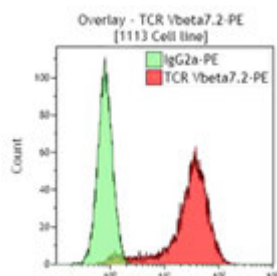
Isotype: IgG2a Mouse

The ZOE antibody recognizes Vβ7.1 (PL4.9 sequence). It does not react with Vβ7.2, but the reactivity on other Vβ7 members like Vβ7.3 (HT267.2 sequence) has not been found, but cannot be formally excluded. This antibody stains from 1.5% to 2.4% of CD3⁺ cells in normal blood. This sequence is also referred to as TRBV4-1, TRBV4-2, TRBV4-3 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM2408	Liquid	IOTest
PE	1 mL	ASR	IM2287	Liquid	IOTest

TCR Vβ7.2

Also called TCRBV7S1



1113 Cell line.

Clone: ZIZOU4

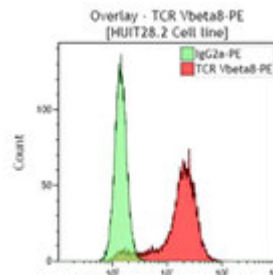
Isotype: IgG2a Mouse

The ZIZOU4 antibody recognizes the human TCR Vβ7.2 allele product. A genetically determined insertion/deletion-related polymorphism of the TCRB locus, including the functional Vβ7.2 variable gene segment, has been described. Thus, the expression of the Vβ7.2 allele product may not be expressed in some individuals (Vβ7.2 deleted/Vβ7.2 deleted haplotypes). The antibody stains from 0% (Vβ7.2 del./Vβ7.2 del. haplotypes) to 5.5% (mean 1.5%) of peripheral CD3⁺ positive lymphocytes in normal blood.

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	B06666	Liquid	IOTest
PE	1 mL	ASR	IM3604	Liquid	IOTest

TCR Vβ8

Also called TCRBV8S1 and S2



HUIT 28.2 Cell line.

Clone: 56C5.2

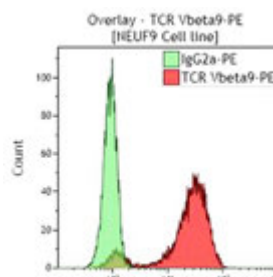
Isotype: IgG2a Mouse

The 56C5.2 antibody recognizes Vβ8.1 and Vβ8.2 (YT35 and PL3.3 sequences). Other Vβ8 sequences are believed to be pseudogenes. It stains 2.6% to 5.1% of peripheral CD3⁺ cells in normal blood. Vβ8 is the target of Staphylococcal Enterotoxin E (SEE). This sequence is also referred to as TRBV12-3, TRBV12-4 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM1148	Freeze-dried	-
FITC	1 mL	ASR	IM1233	Liquid	IOTest
PE	1 mL	ASR	IM2289	Liquid	IOTest

TCR Vβ9

Also called TCRBV9S1



NEUF9 Cell line.

Clone: FIN9

Isotype: IgG2a Mouse

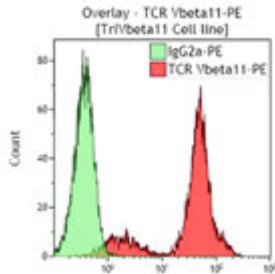
There is only one functional member of this T cell receptor subfamily (IGRB20 sequence, identical to sequence PL2.6). The FIN9 antibody recognizes the product of that gene. It stains 1.6% to 3.2% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV3-1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM2003	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR V β 11

Also called TCRBV11S1



Tri Vbeta 11 Cell line.

Clone: C21

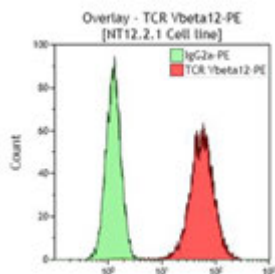
Isotype: IgG2a Mouse

Two V β 11 sequences (PL3.12, and PH15 sequences) are described in the literature differing only in their leader sequence, and, therefore, result in the same mature protein. The C21 antibody recognizes the gene product of these sequences and stains 0.4% to 0.9% of peripheral CD3 positive cells in normal blood. An invariant V α 24/V β 11 T cell receptor is expressed in all individuals by clonally expanded CD4⁺ CD8⁺ T cells, reactive to bacterial antigens. This unique lymphocyte population restricted by the CD1d molecule recognition has been identified as the natural killer T (NKT) cells. The V β 11 sequence is also referred to as TRV25-1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM1582	Freeze-dried	-
FITC	1 mL	ASR	IM1586	Liquid	IOTest
PE	1 mL	ASR	IM2290	Liquid	IOTest
APC	0.5 mL	ASR	A66905	Liquid	IOTest

TCR V β 12

Also called TCRBV12S1



NT12.2.1 Cell line.

Clone: VER2.32.1

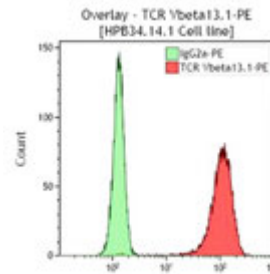
Isotype: IgG2a Mouse

The VER2.32.1 monoclonal antibody recognizes HBP54 identical to PH27 sequence often referred to as V β 12.2. The reactivity of the other members of this family (PL4.2 sequence) and other recently described V β 12 genes (HT96 sequence) has not been found but cannot be formally excluded. This antibody stains from 1.1% to 1.9% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV10-3 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1587	Liquid	IOTest
PE	1 mL	ASR	IM2291	Liquid	IOTest

TCR V β 13.1

Also called TCRBV13S1



HPB34.14.1 Cell line.

Clone: IMMU 222

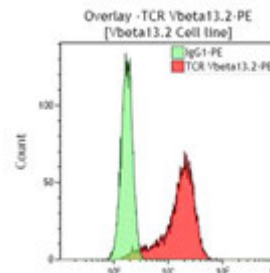
Isotype: IgG2b Mouse

V β 13 is a complex subfamily of the T cell receptor. The IMMU 222 antibody recognizes V β 13.1 member (HBP34 sequence). V β 13.3 (IGRB14 sequence) is not recognized. Reactivity with other members of this subfamily has not been found, but cannot be formally excluded. It has been recently shown that Immu 222 can recognize the V β 13.4 and V β 13.6 (IGRB16 sequence) subsets. This antibody stains 1.8% to 3.3% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV6-5, TRBV6-6, TRBV6-9 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1554	Liquid	IOTest
PE	1 mL	ASR	IM2292	Liquid	IOTest

TCR V β 13.2

Also called TCRBV13S2



Vbeta13.2 Cell line.

Clone: H132

Isotype: IgG1 Mouse

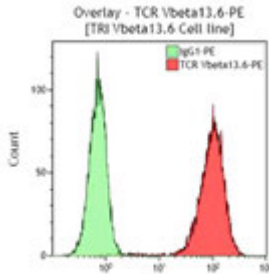
The antibody H132 recognizes the V β 13.2 allele product, but does not react with the V β 3.1, 13.3, 13.5 and 13.6 allele products of the V β 13 subfamily. The specificity of this antibody has been confirmed at the Human TCR Workshop in San Francisco, CA, in 1995. This antibody stains from 0.8% to 5.3% (mean 2.8%) of peripheral CD3⁺ lymphocytes in normal blood.

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM3603	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR V β 13.6

Also called TCRBV13S6



TRI Vbeta 13.6 Cell line.

Clone: JU74.3

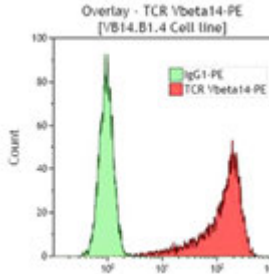
Isotype: IgG1 Mouse

The JU74.3 antibody recognizes the V β 13.6 sequence (IGRb16 sequence). V β 13.1 (HBP34 sequence) is not recognized. The reactivity of the other members of this complex subfamily has not been found, but cannot be formally excluded. JU74.3 stains from 0.9% to 1.9% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV6-6 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1330	Liquid	IOTest
PE	1 mL	ASR	B07225	Liquid	IOTest

TCR V β 14

Also called TCRBV14S1



VB14.B1.4 Cell line.

Clone: CAS1.1.3

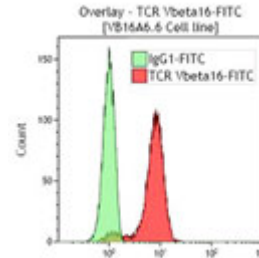
Isotype: IgG1 Mouse

V β 14 is a single member subfamily (PL8.1 sequence identical to PH21 sequence). The CAS1.1.3 antibody stains from 2.2% to 5.6% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV27 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1558	Liquid	IOTest
PE	1 mL	ASR	IM2047	Liquid	IOTest

TCR V β 16

Also called TCRBV16S1



VB16A6.6 Cell line

Clone: TAMAYA1.2

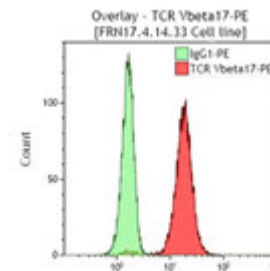
Isotype: IgG1 Mouse

V β 16 is a single member subfamily (HBP42 sequence identical to HT370 sequence). The TAMAYA1.2 antibody stains from 0.4% to 1.1% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV14 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1560	Liquid	IOTest

TCR V β 17

Also called TCRBV17S1



FRN17.4.14.33 Cell line.

Clone: E17.5F3.15.13

Isotype: IgG1 Mouse

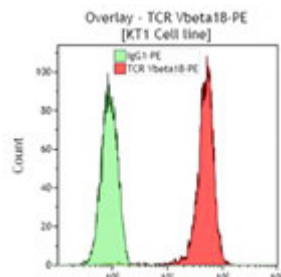
The E17.5F3.15.13 antibody recognizes the HBVT02 sequence and is the only member of this subfamily. It stains from 3.3% to 7% of peripheral CD3⁺ cells in normal blood. V β 17 is the target of Mycoplasma Arthritis Superantigen (MAS) and Staphylococcal Enterotoxin B (SEB). This sequence is also referred to as TRBV19 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1234	Liquid	IOTest
PE	1 mL	ASR	IM2048	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR V β 18

Also called TCRBV18S1



KT1 Cell line.

Clone: BA62.6

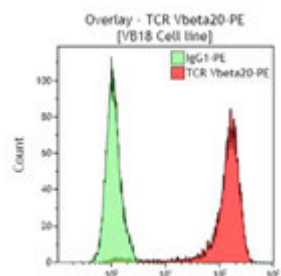
Isotype: IgG1 Mouse

The BA62 antibody recognizes the PH29 sequence identical to the HBVT56 sequence, the only member of the V β 18 subfamily. The BA62 antibody stains from 0.7% to 1.4% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV18 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM2049	Liquid	IOTest

TCR V β 20

Also called TCRBV20S1



VB18 Cell line.

Clone: ELL1.4

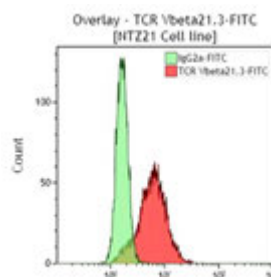
Isotype: IgG2a Mouse

V β 20 is a single member subfamily (HUT102 sequence) of the T cell receptor. Two alleles have been identified for this sequence. One of them is a frequent null allele (frequency estimated at 11%). No cells are stained on PBL from certain specimens whereas around 2.4% is expected for specimens expressing the functional allele. This sequence is also referred to as TRBV30 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1562	Liquid	IOTest
PE	1 mL	ASR	IM2295	Liquid	IOTest

TCR V β 21.3

Also called TCRBV21S3



NTZ21 Cell line.

Clone: IG125

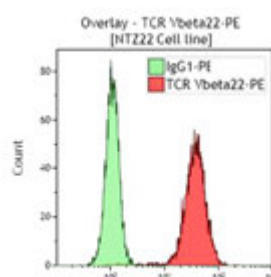
Isotype: IgG2a Mouse

V β 21 is a subfamily of the T cell receptor. The IG125 antibody recognizes the IGRb01 sequence identical to TCR BV21.3 sequence. Recognition of other sequences within this subfamily has not been found, but cannot be formally excluded. The IG125 antibody stains from 2.2% to 3.6% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV11-2 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1483	Liquid	IOTest

TCR V β 22

Also called TCRBV22S1



NTZ22 Cell line.

Clone: IMMU 546

Isotype: IgG1 Mouse

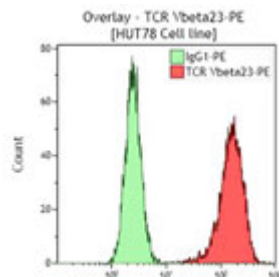
V β 22 is a subfamily of the T cell receptor. The IMMU 546 antibody recognizes the IGRb03 sequence. Another gene has been described for this family which differs by only one amino acid and may represent an allelic variant. Recognition of this sequence is likely, but has not been formally proven yet. The IMMU 546 stains from 2.4% to 5.1% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV2 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1484	Liquid	IOTest
PE	1 mL	ASR	IM2051	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR V β 23

Also called TCRBV23S1



HUT78 Cell line.

Clone: AF23

Isotype: IgG1 Mouse

V β 23 is a family with a single member (IGRb04 sequence), the product of which is recognized by the AF23 antibody. V β 23 is expressed on the HUT78 and H9 cell lines, which is frequently used to grow HIV. AF23 stains from 0.4% to 5% of peripheral CD3⁺ cells in normal blood. This sequence is also referred to as TRBV13 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
PE	1 mL	ASR	IM2004	Liquid	IOTest

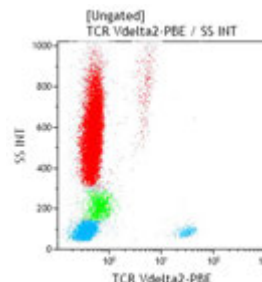
TCR V δ 1

Clone: R9.12

Isotype: IgG1 Mouse

The R9.12 antibody recognizes the variable δ 1 segment of the $\gamma\delta$ T cell receptor. V δ 1 is rearranged on both C α and C δ and is expressed in these two cell types. R9.12 reacts only with $\gamma\delta^+$ V δ 1⁺ cells and not with $\alpha\beta^+$ V δ 1⁺ cells. V δ 1⁺ $\gamma\delta^+$ cells are the major T cell population at birth and are over expressed in intestinal intraepithelial lymphocytes. This sequence is also referred to as TRDV1 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
UNLB	0.1 mg	RUO	IM1761	Freeze-dried	-

TCR V δ 2

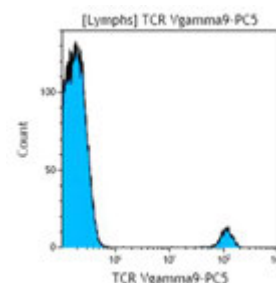
Lysed normal whole blood sample

Clone: IMMU 389

Isotype: IgG1 Mouse

V δ 2 is the human variable δ 2 gene of the $\gamma\delta$ T cell receptor. V δ 2⁺ T cells are the main population of the circulating $\gamma\delta$ T cells. The IMMU 389 recognizes the $\gamma\delta$ complex from the V δ 2⁺ T cell receptor (non reducing conditions), and the isolated δ chain under reducing conditions. This antibody stains 0.5% to 10% of PBL in normal blood, representing around 70% of the peripheral $\gamma\delta$ T cells. V δ 2 is mostly associated with Vy9. This sequence is also referred to as TRDV2 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1464	Liquid	IOTest
PB	0.5 mL	ASR	B49310	Liquid	IOTest

TCR Vy9Lysed normal whole blood sample
gated on lymphocytes.

Clone: IMMU 360

Isotype: IgG1 Mouse

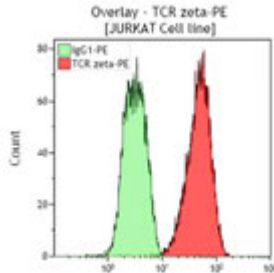
Vy9 is the only functional member of the group II γ variable genes of the $\gamma\delta$ T cell receptor. The IMMU 360 antibody stains 0.5% to 10% of PBL in normal blood, representing around 70% of circulating $\gamma\delta^+$ T cells. Therefore, Vy9 positive cells are the major population of circulating $\gamma\delta$ T cells. Vy9 is mainly associated with V δ 2. The combination Vy9-V δ 2 $\gamma\delta$ T cell seems to recognize mycobacterial antigens. This sequence is also referred to as TRGV9 (based on the IMGT gene nomenclature).

Form	Size	Status	Part#	Format	Line
FITC	1 mL	ASR	IM1463	Liquid	IOTest
PC5	0.5 mL	ASR	A63663	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TCR ζ

The ζ subunit is a 16 kDa surface molecule associated with the T cell receptor. Its expression is restricted to T lymphocytes and NK cells. In T lymphocytes, the ζ subunit is expressed as a disulfide-linked homodimer of 32 kDa or as a disulfide-linked heterodimer with a 21 kDa subunit designated η . Both of these dimeric species are non-covalently associated with the remaining subunits of the CD3-TCR-antigen receptor complex. In NK cells, the ζ subunit is expressed as a disulfide-linked homodimer of 32 kDa or as a disulfide-linked heterodimer with a 12 kDa subunit. It is associated with the CD16 molecule (Fc γ RIII).



JURKAT Cell line.

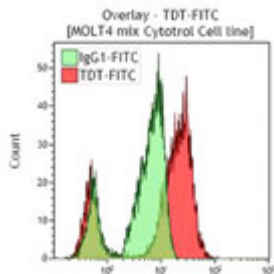
Clone: 2H2D9 (TIA-2) Isotype: IgG1 Mouse

The 2H2D9 (TIA-2) antibody recognizes a cytoplasmic epitope of the ζ subunit of the T lymphocyte receptor complex. The TIA-2 antibody was evaluated during the Fifth International Workshop on Human Leukocyte Differentiation Antigens. TIA-2 antibody can be used to detect intracytoplasmic TCR- ζ in flow cytometry after permeabilization with digitonin.

Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3169	Liquid	IOTest

TdT

Terminal Deoxynucleotidyl Transferase (TdT) is an intra nuclear marker normally present at high levels in cortical thymocytes and a minor subset of bone marrow pre-lymphocytes.



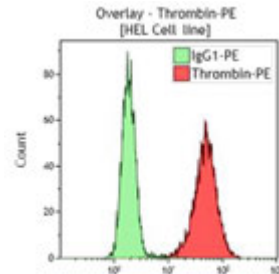
MOLT4 Mix Cytotrol Cell line.

Clone: HT1 + HT4 + HT8 + HT9 Isotype: IgG Mouse

Form	Size	Status	Part#	Format	Line
FITC	50 tests	CE	IM3524	Liquid	-
FITC	1 mL	ASR	IM3524U	Liquid	-

Thrombin receptor

The Thrombin Receptor (60 to 80 kDa) is expressed on a variety of cells including platelets and endothelium. The receptor is a substrate of thrombin and has been shown to play a role in the activation of platelets.



HEL Cell line.

Clone: SPAN 12 Isotype: IgG1 Mouse

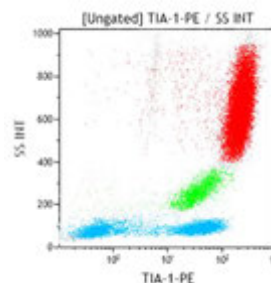
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM2583	Liquid	IOTest

Clone: WEDE15 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM2085	Freeze-dried	-
PE	2 mL	ASR	IM2584	Liquid	IOTest

TIA-1

The T cell intracellular antigen 1 (TIA-1) is a 17 kDa cytoplasmic granule-associated protein, expressed in cells possessing cytolytic potential. TIA-1 is also designated as GMP-17 (granule membrane protein of 17 kDa). The GMP-17/TIA-1 molecule could be involved in the molecular signaling cascade during Fas (CD95)-mediated apoptosis. In normal peripheral blood lymphocytes, TIA-1 is expressed by 90% of CD16⁺, 50-60% of CD8⁺, and less than 10% of CD4⁺ cells. Although TIA-1 may be detected in unstimulated T lymphocytes, activated T lymphocytes are induced to express disulfide linked polymers of the 17 kDa protein, also recognized by TIA-1. TIA-1 is expressed by all monocytes and granulocytes, by activated CD4⁺ T-cell clones and activated natural killer cell clones, and by Con A-activated thymocytes. On the contrary, TIA-1 is not expressed by B lymphocytes or B-cell lines.



Lysed normal whole blood sample.

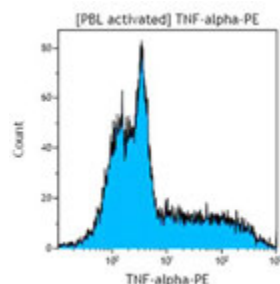
Clone: 2G9A10F5 Isotype: IgG1 Mouse

Form	Size	Status	Part#	Format	Line
UNLB	0.2 mg	ASR	IM2550	Freeze-dried	-
PE	2 mL	ASR	IM3293	Liquid	IOTest

SINGLE-COLOR LIQUID REAGENTS

TNF α

Tumor necrosis factor α (TNF α) or cachectin is a cytokine that was first identified based on its cytotoxic activity against various cell lines and tumor cells. Human TNF α is synthesized as a pro-protein with a molecular weight of 26 kDa (membrane-bound form). The pro-protein is cleaved by a specific metalloprotease (TACE) yielding a monomeric, soluble form of 17 kDa. Under physiological conditions, TNF α forms a homotrimeric protein. This cytokine is primarily produced by mononuclear phagocytes, and by activated lymphocytes. Immunostaining allows intracellular detection of TNF α before it can be detected by a bioassay. TNF α acts on target cells by binding to two types of receptors, the TNF α receptor I (TNF-RI or CD120a) and the TNF α receptor II (TNF-RII or CD120b). TNF α elicits a wide spectrum of immune and inflammatory responses, including the induction of other cytokines and immunoregulatory molecules, cell growth and differentiation and apoptosis. This molecule is also involved in Th1 - Th2 (T helper 1 - T helper 2) cytokine pathways (or Type 1 - Type 2 responses), as a Th1-effector cytokine.

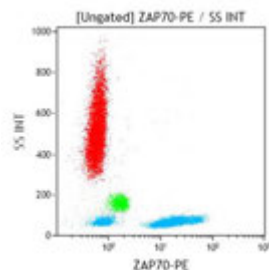


Activated PBL.

Clone: IPM2 (188)			Isotype: IgG1 Mouse		
Form	Size	Status	Part#	Format	Line
PE	2 mL	ASR	IM3279U	Liquid	IOTest

ZAP-70

Zap-70, a Syk family protein tyrosine kinase expressed in T and NK cells, plays a critical role in mediating T cell activation in response to T cell receptor (TCR) engagement. Following TCR engagement, Zap-70 is rapidly phosphorylated on several tyrosine residues, presumably by two mechanisms: autophosphorylation and transphosphorylation by the Src family tyrosine kinase, Lck. Tyrosine phosphorylation of Zap-70 correlates with its increased kinase activity and downstream signaling events.



Lysed normal whole blood sample.

Clone: SBZAP			Isotype: IgG1 Mouse		
The monoclonal antibody SBZAP was generated against a KLH-peptide sequence corresponding to the human ZAP-70 amino acid residues 280-309.					
Form	Size	Status	Part#	Format	Line
UNLB	50 tests	RUO	B10739	Liquid	-
PE	50 tests	RUO	B57658	Liquid	IOTest

ISOTYPIC CONTROLS

Mouse

IgG

Form	Size	Format	Line	Status	Part #
UNLB	100 tests	Freeze-dried	COULTER CLONE	RUO	6602398
FITC	100 tests	Freeze-dried	COULTER CLONE	RUO	6602431
RD1	100 tests	Liquid	COULTER CLONE	RUO	6603482

IgG1

Form	Size	Format	Line	Status	Part #
UNLB	100 tests	Liquid	-	RUO	IM0571
FITC	100 tests	Liquid	IOTest	ASR	IM0639U
FITC	100 tests	Liquid	IOTest	CE	A07795
FITC	50 tests	Liquid	CYTO-STAT	IVD & CE	6603864
FITC	100 tests	Freeze-dried	COULTER CLONE	IVD & CE	6602928
PE	100 tests	Liquid	IOTest	ASR	IM0670U
PE	100 tests	Liquid	IOTest	CE	A07796
RD1	100 tests	Liquid	COULTER CLONE	IVD & CE	6602884
ECD	100 tests	Liquid	IOTest	ASR	IM2714U
ECD	100 tests	Liquid	IOTest	CE	A07797
ECD	50 tests	Liquid	CYTO-STAT	RUO	6604548
PC5	100 tests	Liquid	IOTest	ASR	IM2663U
PC5	100 tests	Liquid	IOTest	CE	A07798
PC5	50 tests	Liquid	CYTO-STAT	RUO	6607012
PC5.5	100 tests	Liquid	IOTest	CE	A62833
PC5.5	100 tests	Liquid	IOTest	ASR	A62834
PC7	100 tests	Liquid	IOTest	RUO	6607099
PC7	100 tests	Liquid	IOTest	CE	737662
APC	100 tests	Liquid	IOTest	CE	IM2475
APC	100 tests	Liquid	IOTest	ASR	IM2475U
APC-A700	100 tests	Liquid	IOTest	ASR	A71118
APC-A700	100 tests	Liquid	IOTest	CE	A79391
APC-A750	100 tests	Liquid	IOTest	ASR	A71120
APC-A750	100 tests	Liquid	IOTest	CE	A79393
PB	100 tests	Liquid	IOTest	ASR	A74766
PB	100 tests	Liquid	IOTest	CE	A74764
KrO	100 tests	Liquid	IOTest	ASR	A96415

IgG2a

Form	Size	Format	Line	Status	Part #
FITC	100 tests	Liquid	IOTest	ASR	A12690
FITC	100 tests	Liquid	IOTest	CE	A12689
FITC	50 tests	Liquid	CYTO-STAT	IVD & CE	6603855
PE	100 tests	Liquid	IOTest	ASR	A09141
PE	100 tests	Liquid	IOTest	CE	A09142
RD1	50 tests	Liquid	CYTO-STAT	IVD & CE	6604119
ECD	100 tests	Liquid	IOTest	ASR	A09144
PC5	100 tests	Liquid	IOTest	ASR	A09147
PC5	100 tests	Liquid	IOTest	CE	A09148
PC7	100 tests	Liquid	IOTest	ASR	A12692
APC	100 tests	Liquid	IOTest	ASR	A12694
APC	100 tests	Liquid	IOTest	CE	A12693

IgG2b

Form	Size	Format	Line	Status	Part #
FITC	50 tests	Liquid	CYTO-STAT	IVD & CE	6603853
RD1	50 tests	Liquid	CYTO-STAT	ASR	6603852
ECD	50 tests	Liquid	CYTO-STAT	ASR	6604700

IgM

Form	Size	Format	Line	Status	Part #
UNLB	100 tests	Liquid	-	RUO	IM1268
FITC	100 tests	Liquid	IOTest	ASR	IM1269U
FITC	50 tests	Liquid	CYTO-STAT	IVD & CE	6603877

NON HUMAN ANTIGENS MARKERS

- Systems and Kits to non-Human Antigens----- 200
- Multi-Color Reagents to non-Human Antigens ----- 201

SYSTEMS AND KITS TO NON-HUMAN ANTIGENS

gTox Flow

Erythropoiesis that takes place in bone marrow is the differentiation of erythroblasts into erythrocytes. A dramatic process during this maturation is the expulsion of the nucleus. The erythrocytes released in the peripheral blood are enucleated making these cells an exception in the cellular process of differentiation. The integrity of the genome can be altered either by clastogenic compounds (leading to the breakage of double stranded DNA) or by aneugenic compounds which will directly interfere with the mitotic apparatus. Both mechanisms will lead to the presence of DNA fragments or an entire chromosome, called micronucleus, in the daughter cells (MNPCE: Micronucleated polychromatic erythrocytes or MNNCE: Micronucleated normochromatic erythrocytes) which will persist in peripheral whole blood and is easily detected in enucleated reticulocytes and erythrocytes. Toxicology studies that are performed on animals play a key role during the drug testing process. As drug candidates may affect genome integrity, they require reliable methods of determination of affected physiological functions. Flow cytometry can be used to measure the percentage of micronucleated reticulocytes in peripheral blood as it correlates with genetic damages. Therefore, it provides a useful assay to assess the status of peripheral reticulocytes during pre-clinical assays.

Mouse Peripheral Blood Micronuclei Enumeration Kit for Flow Cytometry

Diluent	17.4 mL
Anti-Mouse CD71-FITC (Clone RI7.217)	0.6 mL
Permeabilizing Reagent	24 mL
RNase	24 mL
Propidium Iodide	24 mL

Size	Status	Part #
60 tests	RUO	A49073

MULTI-COLOR REAGENTS TO NON-HUMAN ANTIGENS

Optimized IOTest three-color combinations of conjugated monoclonal antibodies that allow the characterization and enumeration of lymphocyte sub-populations in rat and in non-human primate. They guarantee an easy flow cytometry multiparametric analysis after red blood cell lysis using a No-Wash procedure. A variety of biological samples can be analyzed, including whole blood, dissociated spleen cells or dissociated lymph node cells, and bone marrow.

NON-HUMAN PRIMATE

3 color

CD3-FITC/CD4-PC7/CD8-APC

Non-Human Primate (NHP) T-Cell Subpopulation iTox3 Combination

Anti-NHP CD3-FITC / CD4-PC7 / CD8-APC combination is designed to discriminate CD3⁺ T cell as well as CD4⁺ and CD8⁺ T cell subpopulations.

Combination	Clone	Isotype
 CD3-FITC	FN18	IgG1 (mouse)
 CD4-PC7	M-T477	IgG2a (mouse)
 CD8-APC	B9.11	IgG1 (mouse)

Size	Line	Status	Part #
50 tests	IOTest	RUO	A44224

CD3-FITC/CD20-PC7/CD16-APC

Non-Human Primate (NHP) T-Cell Subpopulation iTox3 Combination

Anti-NHP CD3-FITC / CD20-PC7 / CD16-APC combination is designed to discriminate T cells, B cells and NK cells.

Combination	Clone	Isotype
 CD3-FITC	FN18	IgG1 (mouse)
 CD20-PC7	B9E9	IgG2a (mouse)
 CD16-APC	3G8	IgG1 (mouse)

Size	Line	Status	Part #
50 tests	IOTest	RUO	A44225

RAT

3 color

CD3-FITC/CD4-PC7/CD8-APC

Rat T-Cell Subpopulation iTox3 Combination

Anti-rat CD3-FITC / CD4-PC7 / CD8-APC combination is designed to discriminate CD3⁺ T cell as well as CD4⁺ and CD8⁺ T cell subpopulations.

Combination	Clone	Isotype
 CD3-FITC	1F4	IgM (mouse)
 CD4-PC7	OX-38	IgG2a (mouse)
 CD8-APC	OX-8	IgG1 (mouse)

Size	Line	Status	Part #
50 tests	IOTest	RUO	A32909

CD3-FITC/CD45RA-PC7/CD161a-APC

Rat T-Cell Subpopulation iTox3 Combination

Anti-Rat CD3-FITC / CD45RA-PC7 / CD161a-APC combination is designed to discriminate T-, B-, and NK-cell sub-populations.

Combination	Clone	Isotype
 CD3-FITC	1F4	IgM (mouse)
 CD45RA-PC7	OX-33	IgG1 (mouse)
 CD161a-APC	10/78	IgG1 (mouse)

Size	Line	Status	Part #
50 tests	IOTest	RUO	A32910

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECONDARY ANTIBODIES

To find the secondary antibody you need:

1. Select the species with which you would like the product to react. These species are in alphabetic order and shaded in blue. For example, if your first antibody is a mouse immunoglobulin (Ig), go to the Anti-Mouse sub section; if it is a rabbit immunoglobulin go to the Anti-Rabbit sub section.
2. Select the host species in which you want the antibody to be made (goat or rabbit).
3. Select the type of Ig you would like to react with. They are in alphabetic order. Within the parenthesis, the fragment specificities are indicated. For example IgG (Fc) means that the secondary antibody is specific for the Fc fragment. If no fragment specificity is indicated, that means that the secondary antibody is specific for the heavy chain of the Ig.
4. Select the adsorption you need to minimize cross-reactions. If you work with human cells, select preferably a product that is adsorbed against human Ig. If you work with mouse cells, select preferably a product that is adsorbed against mouse Ig.
5. Select, if available, between the whole Ig or only the F(ab')₂ fragment.
6. Select the form.

Anti-Human

Goat F(ab')₂ Anti-Human IgG (Fc)

Cross adsorbed against bovine, human and mouse Ig

Form	Size	Format	Line	Status	Part #
FITC	1 mg	Freeze-dried	-	RUO	IM1627
PE	1 mL	Freeze-dried	-	RUO	IM0550

Goat F(ab')₂ Anti-Human IgG (H+L)

Cross adsorbed against bovine, human and mouse Ig

Form	Size	Format	Line	Status	Part #
HRP	0.5 mL	Freeze-dried	-	RUO	IM0837
FITC	1 mg	Freeze-dried	-	RUO	IM0839
PE	1 mL	Freeze-dried	-	RUO	IM1626

Anti-Mouse

Goat Anti-Mouse IgG (H+L)

Cross adsorbed against human, bovine and horse Ig

Form	Size	Format	Line	Status	Part #
Purified	1.5 mg	Liquid	-	RUO	IM0815

Goat F(ab')₂ Anti-Mouse IgG (Fc)

Cross adsorbed against human, bovine and horse Ig

Form	Size	Format	Line	Status	Part #
FITC	1 mg	Freeze-dried	-	RUO	IM1619
PE	1 mL	Freeze-dried	-	RUO	IM0551

Goat F(ab')₂ Anti-Mouse IgG (H+L)

Cross adsorbed against human, bovine and horse Ig

Form	Size	Format	Line	Status	Part #
Purified	1 mg	Liquid	-	RUO	IM1618
BIOT	0.5 mL	Freeze-dried	-	RUO	IM0816
HRP	0.5 mL	Freeze-dried	-	RUO	IM0817
FITC	1 mg	Freeze-dried	-	RUO	IM0819
PE	1 mL	Freeze-dried	-	RUO	IM0855

Goat F(ab')₂ Anti-Mouse IgM

Cross adsorbed against human, bovine and horse Ig

Form	Size	Format	Line	Status	Part #
FITC	1 mg	Freeze-dried	-	RUO	IM1620
PE	1 mL	Freeze-dried	-	RUO	IM0555

Goat F(ab')₂ Anti-Mouse IgM + IgG (H+L)

Cross adsorbed against human, bovine and horse Ig

Form	Size	Format	Line	Status	Part #
FITC	1 mg	Freeze-dried	-	RUO	IM1621

SECONDARY ANTIBODIES

Anti-Rabbit

Goat F(ab')₂ Anti-Rabbit IgG (H+L)

Cross adsorbed against human Ig

<i>Form</i>	<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>
BIOT	0.5 mL	Freeze-dried	-	RUO	IM0830
HRP	0.5 mL	Freeze-dried	-	RUO	IM0831
FITC	1 mg	Freeze-dried	-	RUO	IM0833

Anti-Rat

Goat Anti-Rat IgG (Fc)

Cross adsorbed against human, bovine and horse Ig

<i>Form</i>	<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>
PE	1 mL	Freeze-dried	-	RUO	IM0552

Goat F(ab')₂ Anti-Rat IgG (H+L)

Cross adsorbed against human, bovine and horse Ig

<i>Form</i>	<i>Size</i>	<i>Format</i>	<i>Line</i>	<i>Status</i>	<i>Part #</i>
HRP	0.5 mL	Freeze-dried	-	RUO	IM0825
PE	1 mL	Freeze-dried	-	RUO	IM1623