

Monoclonal Antibodies to the Human CD45 Antigen

Catalog Numbers MHCD4515, MHCD4530, MHCD4530TR, MHCD4520, MHCD4501, MHCD4501-4, MHCD4504, MHCD4504-4, MHCD4517, MHCD4522, MHCD4506, MHCD4506-5, MHCD4531, MHCD4518, MHCD4512, MHCD4505, MHCD4505-4, MHCD4527, MHCD4529

Pub. No. MAN0003917 Rev. B.0



WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

Product Description

Mouse monoclonal antibody to the human CD45 antigen

- Clone: HI30
- Isotype: Mouse IgG1
- Lot no./expiration: See label.
- Buffer: Phosphate buffered saline (PBS)
- Stabilizer: Highly purified BSA
- Preservative: 0.1% sodium azide

Contents and Storage

Catalog numbers that appear as links open the web pages for those products.

To see a complete list of antibody offerings and for more information on RUO formats of this clone, please visit <http://thermofisher.com>.

Table 1 Monoclonal Antibodies to the Human CD45 Antigen

Component	Catalog No.	Amount	Tests	Excitation	Peak Emission	Storage
Biotin	MHCD4515	0.5 mL	100 min	N/A	N/A	Store reagents at 2–8°C. Avoid light exposure. Use dim light during handling, incubating with cells, and before analyzing. Analyze cells within 18 hours of staining. If diluting the reagent, dilute only the quantity to be used within 1 week.
Pacific Orange™	MHCD4530	0.5 mL	100 min	405 nm	551 nm	
Pacific Orange™	MHCD4530TR	0.125 mL	25 min	405 nm	551 nm	
Alexa Fluor™ 488	MHCD4520	0.5 mL	100 min	488 nm	519 nm	
FITC	MHCD4501	0.5 mL	100 min	488 nm	525 nm	
FITC	MHCD4501-4	2.0 mL	400 min	488 nm	525 nm	
R-PE	MHCD4504	0.5 mL	100 min	488 nm	575 nm	
R-PE	MHCD4504-4	2.0 mL	400 min	488 nm	575 nm	
PE-TR (Texas Red™ conjugates)	MHCD4517	0.5 mL	100 min	488 nm	615 nm	
PE-Alexa Fluor™ 610	MHCD4522	0.5 mL	100 min	488 nm	628 nm	
TC (TRI-COLOR™, PE-Cy® 5) ^[1,2]	MHCD4506	0.5 mL	100 min	488 nm	670 nm	
TC	MHCD4506-5	2.5 mL	500 min	488 nm	670 nm	
PerCP	MHCD4531	0.5 mL	100 min	488 nm	678 nm	
PE-Cy® 5.5	MHCD4518	0.5 mL	100 min	488 nm	694 nm	
PE-Cy® 7	MHCD4512	0.5 mL	100 min	488 nm	767 nm	
APC	MHCD4505	0.5 mL	100 min	600-650 nm	660 nm	
APC	MHCD4505-4	2.0 mL	400 min	600-650 nm	660 nm	
APC-Alexa Fluor™ 750	MHCD4527	0.5 mL	100 min	600-650 nm	775 nm	
Alexa Fluor™ 700	MHCD4529	0.5 mL	100 min	630-702 nm	723 nm	

^[1] The efficiency of energy transfer in tandem dyes can be significantly decreased by exposure to visible light. We recommend that longer wavelength fluorochrome conjugates, eg. PE-Cy® 7 and Alexa Fluor™ 700, be protected from light during staining and while awaiting analysis.

^[2] Cy® is a trademark of GE Healthcare.

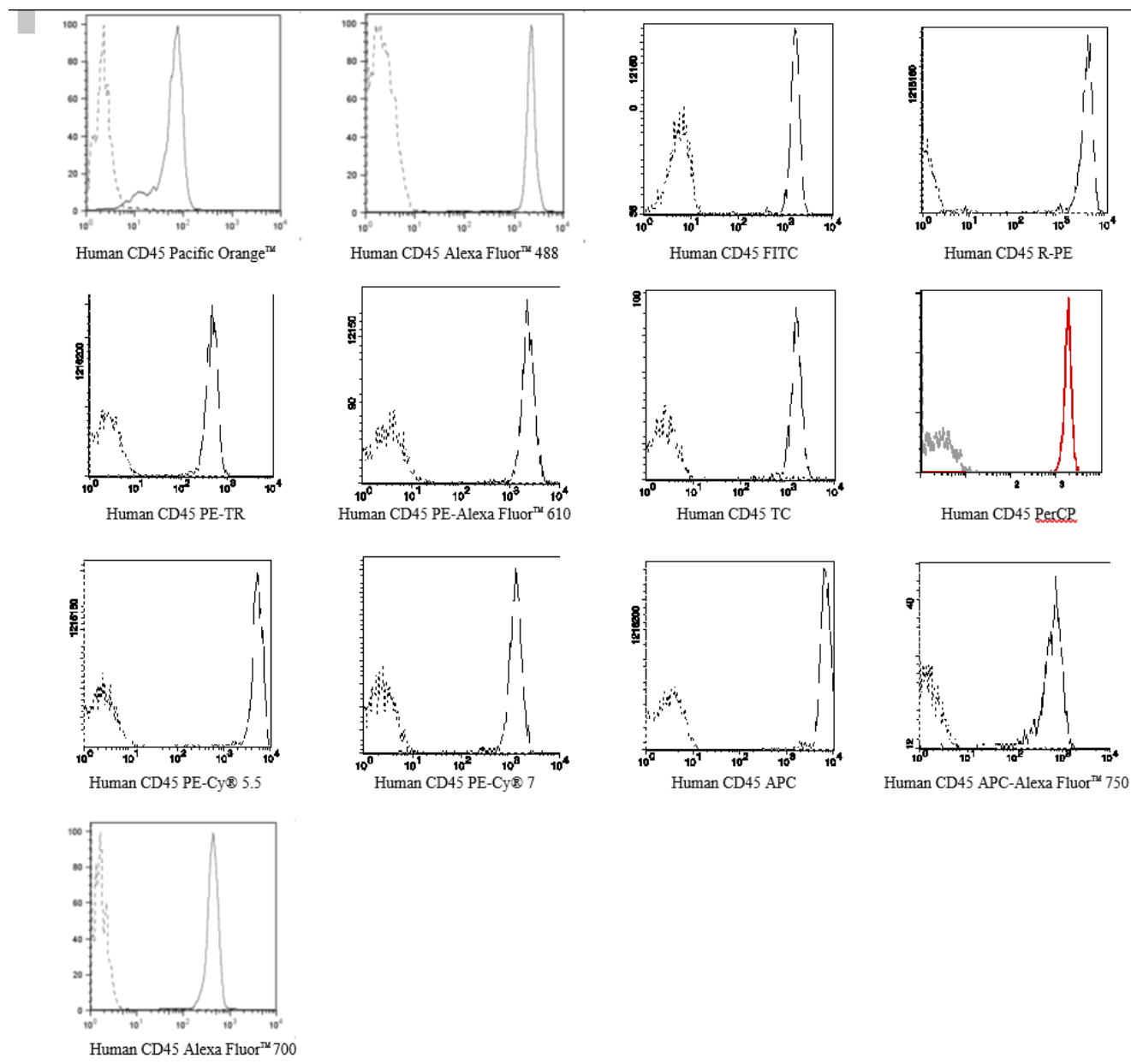
Product Characterization

Property	Property Information
Antigen Specificity	This antibody recognizes the CD45 antigen, also known as Leukocyte Common Antigen (LCA). CD45 is expressed on all cells of hematopoietic origin with the exception of platelets, red blood cells, and their immediate precursors. CD45 is considered a pan leukocyte marker.
Leukocyte Workshop Status	Leukocyte Typing IV
Product Use	Each lot is tested by flow cytometry using human peripheral blood leukocytes (PBL). Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Log fluorescence intensity profiles of human peripheral blood lymphocytes

Analyzed on a FACSCalibur™, FACScan™, FACS Vantage™, or BD™ LSR II flow cytometer.

Negative control profiles represent unstained cells.



Note: Flow cytometric data shown may not necessarily have been generated using the enclosed lot of reagent. For this reason, and due to differences in flow cytometers and cytometer settings, results may vary from those illustrated above. It is suggested that investigators titrate reagents to determine optimal conditions for use in their systems.



Revision history: Pub. No. MAN0003917 B.0

Revision	Date	Description
B.0	26 July 2023	Regulatory statement replaced and emission/excitation data updated.
A.0	3 April 2023	New document for product insert.

The information in this guide is subject to change without notice.

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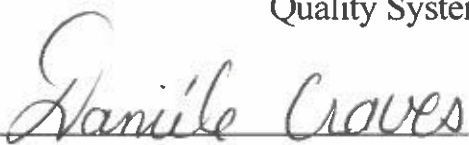



CERTIFICATE OF ANALYSIS

A letter at the end of the lot number signifies an additional packaging of this same lot.

Product Description	Mouse anti-Human CD45 Pac Orange
Catalog Number	MHCD4530
Lot Number	221010021
Expiration Date	17 Oct 2024
Appearance (Color and Clarity)	Gold/yellow and Clear
Format	Conjugated
Storage Buffer	PBS +BSA
Volume	0.5 mL
Antibody Concentration/Test Size	0.20 mg/mL
Total Protein Concentration	4.20 mg/mL
Release Test Method	Flow Cytometry
Filtration	0.2 µm
Storage	2-8°C
Regulatory Status	Analyte Specific Reagent
Preservative	0.1% Sodium Azide
Country of Origin	USA

This product meets the requirements of the Life Technologies
Quality System in effect at the time of release.


QUALITY


Date:

www.lifetechnologies.com

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E-mail: techsupport@lifetech.com

Protocol for MICS experiments

Protocol for MACSima™ Imaging Cyclic Staining

MICS (MACSima™ Imaging Cyclic Staining) is a cyclic immunofluorescence staining method for ultrahigh-content imaging of samples using the MACSima Imaging System. All steps including the immunofluorescence staining are carried out in a fully automated manner by the instrument.

Staining protocol

1. Prepare sample(s) for immunofluorescence staining using either FFPE, PFA, or acetone fixation.
2. Mount the sample(s) onto MACSwell™ Sample Carriers.
3. Pipet the individual antibody conjugates at their final dilution into their dedicated well positions on a MACSwell Deepwell Plate, as indicated by the MACSima™ Instrument software.
4. Place the antibody-containing MACSwell Deepwell Plate and the mounted sample(s) into the instrument.
5. Follow the instructions of the software to start the experiment. The instrument will perform the cyclic staining procedure in a fully automated manner. One MICS cycle comprises the following steps:
 - a. 10 min immunostaining at room temperature
 - b. Image acquisition
 - c. Signal erasure, which is achieved either via photobleaching when using conventional or REAfinity™ Antibodies, or via controlled signal release by addition of REAlease™ Release Reagent when using REAdelease™ or REAlease™ Antibodies.
6. Analyze acquired image data using MACS® IQ View Image analysis software.

▲ **Note:** MICS-pre-tested antibodies are also suited for standard immunofluorescence microscopy. The optimal experimental conditions have to be determined by the user.

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[<https://www.miltenyibiotec.com/UN-en/legal-notes.html>]

CD123 Antibody, anti-human, VioGreen™

Order no. 130-113-330

100 tests in 200 µL

One test corresponds to labeling of 10^6 cells in a final volume of 100 µL (applies only to flow cytometry).

For research use only

Product format

Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide.

Storage

Store protected from light at 2–8 °C. Do not freeze.

Clone

AC145

Clonality

monoclonal

Isotype

mouse IgG2aκ

Isotype control

Isotype Control Antibody, mouse IgG2a

Host

mouse

Type of antibody

Primary antibodies

Species reactivity

human

Antigen

CD123

Alternative names of antigen

IL3RA, IL3R, IL3RAY, IL3RX, IL3RY, hIL-3Ra, IL-3Rα

Molecular mass of antigen [kDa]

41

Distribution of antigen

B cells, granulocytes, monocytes, macrophages, endothelial cells, mast cells, megakaryocytes, red blood cells, eosinophils, basophils, bone marrow, brain, placenta

Applications

Flow cytometry

Dilution: 1:50

Cells should be stained prior to fixation, if formaldehyde is used as a fixative.

Data source: Miltenyi Biotec (Quality Control)

Protocol: [Cell surface flow cytometry staining protocol \(PBS/EDTA/BSA 1:50\)](#)

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- 1.1 Important safety information
- 1.2 Background information
- 1.3 Applications
- 1.4 Technical specifications

1. Description

This product is for research use only.

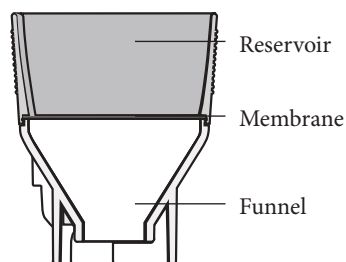
For use by professional laboratory personnel only.

Products

	50 filters, sterile and single packed	100 filters, sterile packed as 4x25
MACS SmartStrainers (30 µm) yellow colored	130-098-458	130-110-915
MACS SmartStrainers (70 µm) purple colored	130-098-462	130-110-916
MACS SmartStrainers (100 µm) orange colored	130-098-463	130-110-917

Storage

Store MACS SmartStrainers dry. The expiration date is indicated on the box label.



1.1 Important safety information

Warning

All biological material must be considered potentially infectious. Regulations for the treatment and disposal of infectious materials must be observed.

1.2 Background information

MACS SmartStrainers are designed for the easy removal of cell aggregates or large particles after tissue dissociation or from blood samples to obtain uniform single-cell suspensions. The smart design of the filters allows improved ventilation during filtration, and so avoids clogging of the filter. The MACS SmartStrainers easily fit into standard 15 and 50 mL conical tubes of all major suppliers. Their compact design facilitates sterile handling. One set contains 50 or 100 sterile and ready-to-use filters.

1.3 Applications

- Generation of single-cell suspensions after tissue dissociation by removing cell aggregates or other large particles.
- Filtering of blood or bone marrow samples to remove cell clumps or other large particles.

1.4 Technical specifications

- For single use only.
- Mesh size: 30 µm, 70 µm, or 100 µm, respectively.
- Reservoir volume: 16 mL.
- Filter area: about 7 cm².
- Width: 37 mm.
- Height: 45 mm.
- Ventilation (avoids flow stop caused by pressure).

▲ Moisten MACS SmartStrainers with media or buffer before use.

▲ Avoid producing air bubbles during filtering.

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Certificate of Analysis

General Product Information

Product Name: **Monoclonal Mouse Anti-Human Terminal Deoxynucleotidyl Transferase/FITC, Clone HT-6**

Code Number: **F7139**

Storage data: **See Product label**

Lot Specific Data

Lot Number: **41741898** Expiration date: **2026MAY31**

Specifications

Test	Specification	Result
Flow Cytometry	Whole lysed human blood and human cells. Staining intensity and % positive cells of the batch must comply to a reference batch.	Pass

QC approval	<u>Majbritt Krog</u>	Date	<u>2024JUN19</u>
QA approval	<u>Janni Buch</u>	Date	<u>2024JUL15</u>

Catalog | Flow Cytometry

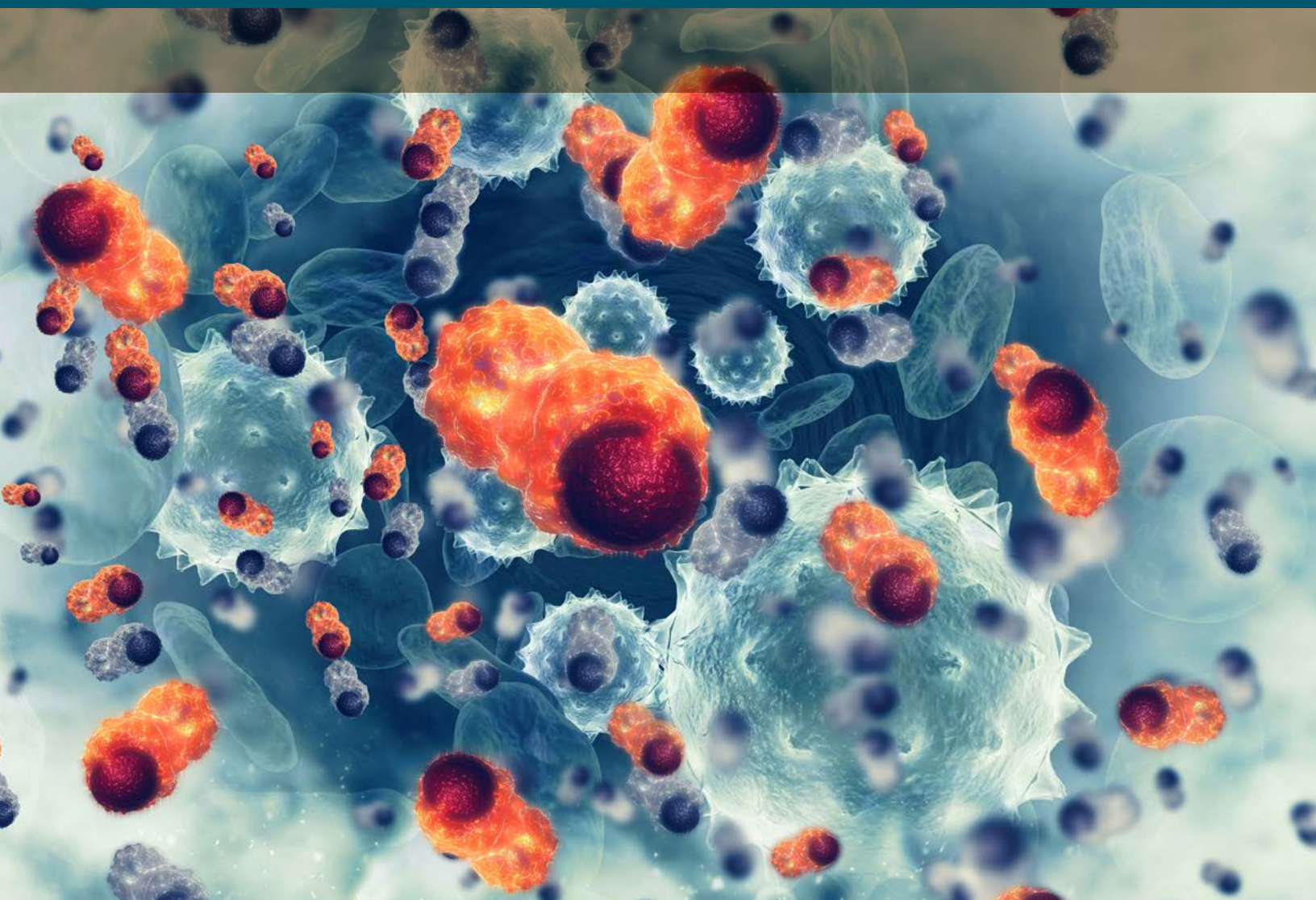


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Dear Valued Customer,

Since 1966, when Danish doctor Niels Harboe founded Dako and began manufacturing antibodies, Dako has developed into a global leader in reagent manufacturing and providing diagnostic solutions. We are driven by our role in the fight against cancer and passionate about creating new solutions, delivering the highest quality, and providing the best possible service to our customers and partners.

Dako was acquired by Agilent in 2012 and is a cornerstone of the Diagnostics & Genomics Group (DGG). As a leader in life sciences, diagnostics and applied chemical markets, Agilent provides powerful support to what we do, including additional R&D resources, investments, and synergies with other Agilent divisions.

With the acquisition of ACEA Biosciences in 2018, Agilent is now in an unprecedented position to offer broader flow cytometry solutions to our customers, including a wider portfolio of reagents and clinical flow cytometers.

With this pivotal view of our rich history and promising future, you can be assured that our commitment to our core values of scientific advancement, certainty, and building lasting partnerships with our customers will stay the same. We will continue to drive scientific advancement in developing and improving products. Our reagents, instruments, software and expertise help hospitals and laboratories worldwide make accurate diagnoses and determine the most effective treatment for patients. Finally, we will continue to develop and honor our partnership with you.

This catalog presents the Dako-branded portfolio of flow cytometry products including antibodies against many different biomarkers in a variety of conjugates. Also included are our widely recognized polyclonal kappa and lambda light chain products as well as flow cytometers and software.

For the extended Flow Cytometry Portfolio please see **www.agilent.com**.

We look forward to establishing new cooperation and thank our present customers for their continued partnership.

Sincerely,



Tom Just



Tom Just
Vice President and General Manager
Reagent Partnership Division
Diagnostics and Genomics Group
Agilent Technologies

Alphabetical Index

Code	Source	Product	See page
A			
Aminopeptidase N , see: CD13			
B			
F711001-2	Mo a Hu	B Cell/FITC , Clone FMC7	18
TC68301-2	Mo a Hu	B Cell/FITC , Clone FMC7 + CD19/APC , Clone HD37 + CD23/RPE , Clone MHM6, MultiMix Triple-Color Reagent	28
F705301-8	Mo a Hu	BCL2 Oncoprotein/FITC , Clone 124	18
C			
R084101-8	Mo a Hu	C3bi Receptor , CD11b/RPE , Clone 2LPM19c	20
K011011-2		Calibration Beads, FluoroSpheres , for Daily Monitoring of the Flow Cytometer (40 Tests)	34
F714101-2	Mo a Hu	CD1a/FITC , Clone NA1/34	18
PR71050-2	Mo a Hu	CD1a/PerCP-Cy5.5 , Clone NA1/34	18
R718901-2	Mo a Hu	CD1a/RPE , Clone NA1/34	18
F076701-2	Mo a Hu	CD2/FITC , Clone MT910	19
R080701-2	Mo a Hu	CD2/RPE , Clone MT910	19
FR89450-2	Mo a Hu	CD2/FITC , Clone MT910 + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
TC66601-2	Mo a Hu	CD2/FITC , Clone MT910 + CD5/APC , Clone DK23 + CD34 Class III/RPE , Clone BIRMA-K3, MultiMix Triple-Color	27
TC67701-2	Mo a Hu	CD2/FITC , Clone MT910 + CD3/APC , Clone UCHT1 + CD7/RPE , Clone CBC.37, MultiMix Triple-Color Reagent	27
C722501-2	Mo a Hu	CD3/APC , Clone UCHT1	19
F081801-2	Mo a Hu	CD3/FITC , Clone UCHT1	19
PB98201-8	Mo a Hu	CD3/PB , Clone UCHT1	19
PR70201-2	Mo a Hu	CD3/PerCP , Clone UCHT1	19
R081001-2	Mo a Hu	CD3/RPE , Clone UCHT1	19
C706701-2	Mo a Hu	CD3/RPE-Cy5 , Clone UCHT1	19
FR87550-2	Mo a Hu	CD3/FITC , Clone UCHT1 + CD4/RPE , Clone MT310, MultiMix Dual-Color	27
FR88150-2	Mo a Hu	CD3/FITC , Clone UCHT1 + CD8/RPE , Clone DK25, MultiMix Dual-Color	27
FR86650-2	Mo a Hu	CD3/FITC , Clone UCHT1 + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
FR86750-2	Mo a Hu	CD3/RPE , Clone UCHT1 + HLA-DP, DQ, DR Antigen/FITC , Clone CR3/43, MultiMix Dual-Color	27
TC67701-2	Mo a Hu	CD3/APC , Clone UCHT1 + CD2/FITC , Clone MT910 + CD7/RPE , Clone CBC.37, MultiMix Triple-Color Reagent	28
TC66001-2	Mo a Hu	CD3/APC , Clone UCHT1 + CD4/RPE , Clone MT310 + CD8/FITC , Clone DK25, MultiMix Triple-Color	28
TC64150-2	Mo a Hu	CD3/RPE-Cy5 , Clone UCHT1 + CD4/RPE , Clone MT310 + CD8/FITC , Clone DK25, MultiMix Triple-Color	31
TC66101-2	Mo a Hu	CD3/APC , Clone UCHT1 + CD16/FITC , Clone DJ130c + CD56/RPE , Clone C5.9, MultiMix Triple-Color	29
TC69001-2	Mo a Hu	CD3/FITC , Clone UCHT1 + CD19/RPE , Clone HD37 + CD45/APC , Clone 2D1, MultiMix Triple-Color Reagent	28
TC66801-2	Mo a Hu	CD3/APC , Clone UCHT1 + CD22/RPE , Clone 4KB128 + TdT/FITC , Clone HT-6, MultiMix Triple-Color	31
TC66701-2	Mo a Hu	CD3/APC , Clone UCHT1 + CD79acy/RPE , Clone HM57 + MPO/FITC , Clone MPO-7, MultiMix Triple-Color	31
C722601-2	Mo a Hu	CD4/APC , Clone MT310	19
F076601-2	Mo a Hu	CD4/FITC , Clone MT310	19
R080501-2	Mo a Hu	CD4/RPE , Clone MT310	19
FR87550-2	Mo a Hu	CD4/RPE , Clone MT310 + CD3/FITC , Clone UCHT1, MultiMix Dual-Color	27
FR86850-2	Mo a Hu	CD4/FITC , Clone MT310 + CD8/RPE , Clone DK25, MultiMix Dual-Color	27
TC66001-2	Mo a Hu	CD4/RPE , Clone MT310 + CD3/APC , Clone UCHT1 + CD8/FITC , Clone DK25, MultiMix Triple-Color	28
TC64150-2	Mo a Hu	CD4/RPE , Clone MT310 + CD3/RPE-Cy5 , Clone UCHT1 + CD8/FITC , Clone DK25, MultiMix Triple-Color	31
C724201-2	Mo a Hu	CD5/APC , Clone DK23	19
F079501-2	Mo a Hu	CD5/FITC , Clone DK23	19

Abbreviations:

a Anti-
Gt Goat
Hu Human
Mo Mouse
Rb Rabbit
Sw Swine

Labels:

APC Allophycocyanin
FITC Fluorescein isothiocyanate
PB Pacific blue
PerCP Peridinin chlorophyll protein complex
PerCP-Cy5.5 Peridinin chlorophyll protein complex-Cy5.5
RPE R-phycoerythrin
RPE-Cy5 R-phycoerythrin-Cy5

Code	Source	Product	See page
R084201-2	Mo a Hu	CD5/RPE , Clone DK23	19
FR88250-2	Mo a Hu	CD5/FITC , Clone DK23 + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
FR72950-2	Mo a Hu	CD5/FITC , Clone DK23 + CD20/RPE , Clone B-Ly1, MultiMix Dual-Color	27
TC66601-2	Mo a Hu	CD5/APC , Clone DK23 + CD2/FITC , Clone MT910 + CD34 Class III/RPE , Clone BIRMA-K3, MultiMix Triple-Color	28
TC66401-2	Mo a Hu	CD5/FITC , Clone DK23 + CD10/RPE , Clone SS2/36 + CD19/APC , Clone HD37, MultiMix Triple-Color	28
TC66301-2	Mo a Hu	CD5/RPE , Clone DK23 + CD19/APC , Clone HD37 + CD20/FITC , Clone B-Ly1, MultiMix Triple-Color	29
F727601-2	Mo a Hu	CD7/FITC , Clone CBC.37	19
PR71150-2	Mo a Hu	CD7/PerCP-Cy5.5 , Clone CBC.37	19
R727701-2	Mo a Hu	CD7/RPE , Clone CBC.37	19
TC67701-2	Mo a Hu	CD7/RPE , Clone CBC.37 + CD2/FITC , Clone MT910 + CD3/APC , Clone UCHT1, MultiMix Triple-Color Reagent	28
F078901-2	Mo a Hu	CD7/FITC , Clone DK24	19
C722701-2	Mo a Hu	CD8/APC , Clone DK25	19
F076501-2	Mo a Hu	CD8/FITC , Clone DK	19
PB98401-8	Mo a Hu	CD8/PB , Clone DK25	19
R080601-2	Mo a Hu	CD8/RPE , Clone DK25	19
FR88150-2	Mo a Hu	CD8/RPE , Clone DK25 + CD3/FITC , Clone UCHT1, MultiMix Dual-Color	27
FR86850-2	Mo a Hu	CD8/RPE , Clone DK25 + CD4/FITC , Clone MT310, MultiMix Dual-Color	27
TC66001-2	Mo a Hu	CD8/FITC , Clone DK25 + CD3/APC , Clone UCHT1 + CD4/RPE , Clone MT310, MultiMix Triple-Color	28
TC64150-2	Mo a Hu	CD8/FITC , Clone DK25 + CD3/RPE-Cy5 , Clone UCHT1 + CD4/RPE , Clone MT310, MultiMix Triple-Color	31
F082601-2	Mo a Hu	CD10/FITC , Clone SS2/36	19
R084801-2	Mo a Hu	CD10/RPE , Clone SS2/36	19
FR88350-2	Mo a Hu	CD10/FITC , Clone SS2/36 + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
TC66401-2	Mo a Hu	CD10/RPE , Clone SS2/36 + CD5/FITC , Clone DK23 + CD19/APC , Clone HD37, MultiMix Triple-Color	28
R084101-8	Mo a Hu	CD11b, C3bi Receptor/RPE , Clone 2LPM19c	20
		CD11b/CD18 , see: CD11b, C3bi Receptor	
F071301-2	Mo a Hu	CD11c, Protein 150,95/FITC , Clone KB90	20
TC66501-2	Mo a Hu	CD11c/RPE , Clone KB90 + CD19/APC , Clone HD37 + CD103/FITC , Clone Ber-ACT8, MultiMix Triple-Color Reagent	30
		CD11c/CD18 , see: CD11c, Protein 150,95	
F083101-2	Mo a Hu	CD13/FITC , Clone WM-47	20
R071501-2	Mo a Hu	CD13/RPE , Clone WM-47	20
TC68501-2	Mo a Hu	CD13/FITC , Clone WM-47 + CD117/APC , Clone 104D2 + HLA-DR Antigen/RPE , Clone AB3, MultiMix Triple-Color Reagent	29
F084401-2	Mo a Hu	CD14/FITC , Clone TÜK4	20
R086401-2	Mo a Hu	CD14/RPE , Clone TÜK4	20
FR70050-2	Mo a Hu	CD14/RPE , Clone TÜK4 + CD45/FITC , Clone T29/33, MultiMix Dual-Color	27
F083001-2	Mo a Hu	CD15/FITC , Clone C3D-1	20
F701101-2	Mo a Hu	CD16, Fc Gamma Receptor III/FITC , Clone DJ130c	20
R701201-2	Mo a Hu	CD16, Fc Gamma Receptor III/RPE , Clone DJ130c	20
TC66101-2	Mo a Hu	CD16/FITC , Clone DJ130c + CD3/APC , Clone UCHT1 + CD56/RPE , Clone C5.9, MultiMix Triple-Color	29
C722401-2	Mo a Hu	CD19/APC , Clone HD37	20
F076801-2	Mo a Hu	CD19/FITC , Clone HD37	20
PB98501-8	Mo a Hu	CD19/PB , Clone HD37	20
PR70350-2	Mo a Hu	CD19/PerCP-Cy5.5 , Clone HD37	20
R080801-2	Mo a Hu	CD19/RPE , Clone HD37	20
C706601-2	Mo a Hu	CD19/RPE-Cy5 , Clone HD37	20
FR89450-2	Mo a Hu	CD19/RPE , Clone HD37 + CD2/FITC , Clone MT910, MultiMix Dual-Color	27
FR86650-2	Mo a Hu	CD19/RPE , Clone HD37 + CD3/FITC , Clone UCHT1, MultiMix Dual-Color	27
FR88250-2	Mo a Hu	CD19/RPE , Clone HD37 + CD5/FITC , Clone DK23, MultiMix Dual-Color	27
FR88350-2	Mo a Hu	CD19/RPE , Clone HD37 + CD10/FITC , Clone SS2/36, MultiMix Dual-Color	27
FR04850-2	a Hu	CD19/RPE , Clone HD37 + Kappa Light Chains/FITC , Rabbit F(ab') ₂ , MultiMix Dual-Color	27
FR04450-2	a Hu	CD19/RPE , Clone HD37 + Lambda Light Chains/FITC , Rabbit F(ab') ₂ , MultiMix Dual-Color	27
TC68301-2	Mo a Hu	CD19/APC , Clone HD37 + B Cell (FMC7)/FITC , Clone FMC7 + CD23/RPE , Clone MHM6, MultiMix Triple-Color Reagent	28
TC69001-2	Mo a Hu	CD19/RPE , Clone HD37 + CD3/FITC , Clone UCHT1 + CD45/APC , Clone 2D1, MultiMix Triple-Color Reagent	28
TC66401-2	Mo a Hu	CD19/APC , Clone HD37 + CD5/FITC , Clone DK23 + CD10/RPE , Clone SS2/36, MultiMix Triple-Color	28
TC66301-2	Mo a Hu	CD19/APC , Clone HD37 + CD5/RPE , Clone DK23 + CD20/FITC , Clone B-Ly1, MultiMix Triple-Color	29
TC66501-2	Mo a Hu	CD19/APC , Clone HD37 + CD11c/RPE , Clone KB90 + CD103/FITC , Clone Ber-ACT8, MultiMix Triple-Color Reagent	30

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TC68901-2	Mo a Hu	CD19/FITC , Clone HD37 + CD22/APC , Clone 4KB128 + CD34/RPE , Clone BIRMA-K3, MultiMix Triple-Color Reagent	29
TC67401-2	Mo a Hu	CD19/APC , Clone HD37 + CD38/FITC , Clone AT13/5 + CD56/RPE , Clone C5.9, MultiMix Triple-Color Reagent	30
TC66901-2	a Hu	CD19/FITC , Clone HD37 + Kappa Light Chains/APC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ , MultiMix Triple-Color	29
TC05150-2	a Hu	CD19/RPE-Cy5 , Clone HD37 + Kappa Light Chains/FITC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ , MultiMix Triple-Color	31
F079901-2	Mo a Hu	CD20/FITC , Clone B-Ly1	20
R701301-2	Mo a Hu	CD20/RPE , Clone B-Ly1	20
FR72950-2	Mo a Hu	CD20/RPE , Clone B-Ly1 + CD5/FITC , Clone DK23, MultiMix Dual-Color	29
TC66301-2	Mo a Hu	CD20/FITC , Clone B-Ly1 + CD5/RPE , Clone DK23 + CD19/APC , Clone HD37, MultiMix Triple-Color	28
C728101-2	Mo a Hu	CD22/APC , Clone 4KB128	21
F706001-2	Mo a Hu	CD22/FITC , Clone 4KB128	21
PR70750-2	Mo a Hu	CD22/PerCP-Cy5.5 , Clone 4KB128	21
R706101-2	Mo a Hu	CD22/RPE , Clone 4KB128	21
TC66801-2	Mo a Hu	CD22/RPE , Clone 4KB128 + CD3/APC , Clone UCHT1 + TdT/FITC , Clone HT-6, MultiMix Triple-Color	31
TC68901-2	Mo a Hu	CD22/APC , Clone 4KB128 + CD19/FITC , Clone HD37 + CD34/RPE , Clone BIRMA-K3, MultiMix Triple-Color Reagent	29
F706201-2	Mo a Hu	CD23/FITC , Clone MHM6	21
R710801-2	Mo a Hu	CD23/RPE , Clone MHM6	21
TC68301-2	Mo a Hu	CD23/RPE , Clone MHM6 + B Cell (FMC7)/FITC , Clone FMC7 + CD19/APC , Clone HD37, MultiMix Triple-Color Reagent	28
F713401-2	Mo a Hu	CD24/FITC , Clone SN3	21
F080101-2	Mo a Hu	CD25, Interleukin-2 Receptor/FITC , Clone ACT-1	21
R081101-2	Mo a Hu	CD25, Interleukin-2 Receptor/RPE , Clone ACT-1	21
F717801-8	Mo a Hu	CD27/FITC , Clone M-T271	21
R716401-8	Mo a Hu	CD28/RPE , Clone CD28.1	21
F084901-2	Mo a Hu	CD30/FITC , Clone Ber-H2	21
F083201-2	Mo a Hu	CD33/FITC , Clone WM-54	21
R074501-2	Mo a Hu	CD33/RPE , Clone WM-54	21
TC68601-2	Mo a Hu	CD33/FITC , Clone WM-54 + CD34 Class III/RPE , Clone BIRMA-K3 + CD117/APC , Clone 104D2, MultiMix Triple-Color	29
C723850-2	Mo a Hu	CD34 Class III/APC , Clone BIRMA-K3	21
F708101-2	Mo a Hu	CD34 Class III/FITC , Clone BIRMA-K3	21
PR70650-2	Mo a Hu	CD34 Class III/PerCP-Cy5.5 , Clone BIRMA-K3	21
R712501-2	Mo a Hu	CD34 Class III/RPE , Clone BIRMA-K3	21
TC66601-2	Mo a Hu	CD34 Class III/RPE , Clone BIRMA-K3 + CD2/FITC , Clone MT910 + CD5/APC , Clone DK23, MultiMix Triple-Color	28
TC68901-2	Mo a Hu	CD34 Class III/RPE , Clone BIRMA-K3 + CD19/FITC , Clone HD37 + CD22/APC , Clone 4KB128, MultiMix Triple-Color Reagent	29
TC68601-2	Mo a Hu	CD34 Class III/RPE , Clone BIRMA-K3 + CD33/FITC , Clone WM-54 + CD117/APC , Clone 104D2, MultiMix Triple-Color	29
TC68701-2	Mo a Hu	CD34 Class III/RPE , Clone BIRMA-K3 + CD41/FITC , Clone 5B12 + CD61/APC , Clone Y2/51, MultiMix Triple-Color Reagent	30
F710101-2	Mo a Hu	CD38/FITC , Clone AT13/5	21
R714401-2	Mo a Hu	CD38/RPE , Clone AT13/5	21
TC67401-2	Mo a Hu	CD38/FITC , Clone AT13/5 + CD19/APC , Clone HD37 + CD56/RPE , Clone C5.9, MultiMix Triple-Color Reagent	30
TC67101-2	Mo a Hu	CD38/FITC , Clone AT13/5 + CD45/APC , Clone 2D1 + CD56/RPE , Clone C5.9, MultiMix Triple-Color Reagent	30
F708801-2	Mo a Hu	CD41, Platelet Glycoprotein IIb/FITC , Clone 5B12	22
R705801-2	Mo a Hu	CD41, Platelet Glycoprotein IIb/RPE , Clone 5B12	22
TC68701-2	Mo a Hu	CD41/FITC , Clone 5B12 + CD34/RPE , Clone BIRMA-K3 + CD61/APC , Clone Y2/51, MultiMix Triple-Color Reagent	30
R701401-2	Mo a Hu	CD42b, Platelet Glycoprotein Ib/RPE , Clone AN51	30
F710201-2	Mo a Hu	CD43/FITC , Clone DF-T1	22
PR70101-2	Mo a Hu	CD45, Leucocyte Common Antigen/PerCP , Clone 2D1	22
TC69001-2	Mo a Hu	CD45/APC , Clone 2D1 + CD3/FITC , Clone UCHT1 + CD19/RPE , Clone HD37, MultiMix Triple-Color Reagent	28
TC67101-2	Mo a Hu	CD45/APC , Clone 2D1 + CD38/FITC , Clone AT13/5 + CD56/RPE , Clone C5.9, MultiMix Triple-Color Reagent	30
TC67501-2	Mo a Hu	CD45/APC , Clone 2D1 + CD71/FITC , Clone Ber-T9 + CD235a/RPE , Clone JC159, MultiMix Triple-Color Reagent	30
C723001-2	Mo a Hu	CD45, Leucocyte Common Antigen/APC , Clone T29/33	22
F086101-2	Mo a Hu	CD45, Leucocyte Common Antigen/FITC , Clone T29/33	22
PB98601-8	Mo a Hu	CD45, Leucocyte Common Antigen/PB , Clone T29/33	22
R708701-2	Mo a Hu	CD45, Leucocyte Common Antigen/RPE , Clone T29/33	22
C709901-2	Mo a Hu	CD45, Leucocyte Common Antigen/RPE-Cy5 , Clone T29/33	22
FR70050-2	Mo a Hu	CD45/FITC , Clone T29/33 + CD14/RPE , Clone TŮK4, MultiMix Dual-Color	27
F080001-2	Mo a Hu	CD45R0/FITC , Clone UCHL1	22
R084301-2	Mo a Hu	CD45R0/RPE , Clone UCHL1	22

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R708601-2	Mo a Hu	CD45RA/RPE , Clone 4KB5	22
F714301-8	Mo a Hu	CD54, ICAM-1/FITC , Clone 6.5B5	22
R725101-2	Mo a Hu	CD56/RPE , Clone C5.9	23
TC66101-2	Mo a Hu	CD56/RPE , Clone C5.9 + CD3/APC , Clone UCHT1 + CD16/FITC , Clone DJ130c, MultiMix Triple-Color	29
TC67401-2	Mo a Hu	CD56/RPE , Clone C5.9 + CD19/APC , Clone HD37 + CD38/FITC , Clone AT13/5, MultiMix Triple-Color Reagent	30
TC67101-2	Mo a Hu	CD56/RPE , Clone C5.9 + CD38/FITC , Clone AT13/5 + CD45/APC , Clone 2D1, MultiMix Triple-Color Reagent	30
R712701-2	Mo a Hu	CD56/RPE , Clone MOC-1	23
F727001-2	Mo a Hu	CD57/FITC , Clone TB01	23
C728001-2	Mo a Hu	CD61, Platelet Glycoprotein IIIa/APC , Clone Y2/51	23
F080301-2	Mo a Hu	CD61, Platelet Glycoprotein IIIa/FITC , Clone Y2/51	23
TC68701-2	Mo a Hu	CD61/APC , Clone Y2/51 + CD34/RPE , Clone BIRMA-K3 + CD41/FITC , Clone 5B12, MultiMix Triple-Color Reagent	30
C727801-2	Mo a Hu	CD64, Fc Gamma Receptor I/APC , Clone 10.1	23
R721901-2	Mo a Hu	CD64, Fc Gamma Receptor I/RPE , Clone 10.1	23
F711201-2	Mo a Hu	CD66abce/FITC , Clone Kat4c	23
F713501-2	Mo a Hu	CD68/FITC , Clone KP1	23
F082901-2	Mo a Hu	CD71, Transferrin Receptor/FITC , Clone Ber-T9	23
TC67501-2	Mo a Hu	CD71/FITC , Clone Ber-T9 + CD45/APC , Clone 2D1 + CD235a/RPE , Clone JC159, MultiMix Triple-Color Reagent	30
C725201-2	Mo a Hu	CD79acy/APC , Clone HM57	24
R715901-2	Mo a Hu	CD79acy/RPE , Clone HM57	24
TC66701-2	Mo a Hu	CD79acy/RPE , Clone HM57 + CD3/APC , Clone UCHT1 + MPO/FITC , Clone MPO-7, MultiMix Triple-Color	31
F713701-2	Mo a Hu	CD79β/FITC , Clone SN8	24
R727201-2	Mo a Hu	CD79β/RPE , Clone SN8	24
F713801-2	Mo a Hu	CD103, Mucosa Lymphocyte Antigen/FITC , Clone Ber-ACT8	24
R718801-2	Mo a Hu	CD103, Mucosa Lymphocyte Antigen/RPE , Clone Ber-ACT8	24
TC66501-2	Mo a Hu	CD103/FITC , Clone Ber-ACT8 + CD11c/RPE , Clone KB90 + CD19/APC , Clone HD37, MultiMix Triple-Color Reagent	30
C724401-2	Mo a Hu	CD117, c-kit/APC , Clone 104D2	24
R714501-2	Mo a Hu	CD117, c-kit/RPE , Clone 104D2	24
TC68501-2	Mo a Hu	CD117/APC , Clone 104D2 + CD13/FITC , Clone WM-47 + HLA-DR Antigen/RPE , Clone AB3, MultiMix Triple-Color Reagent	29
TC68601-2	Mo a Hu	CD117/APC , Clone 104D2 + CD33/FITC , Clone WM-54 + CD34/RPE , Clone BIRMA-K3, MultiMix Triple-Color Reagent	29
		CD117 , see also: c-kit	
C725601-2	Mo a Hu	CD138/APC , Clone MI15	24
R722901-2	Mo a Hu	CD138/RPE , Clone MI15	24
F087001-2	Mo a Hu	CD235a, Glycophorin A/FITC , Clone JC159	24
R707801-2	Mo a Hu	CD235a, Glycophorin A/RPE , Clone JC159	24
TC67501-2	Mo a Hu	CD235a/RPE , Clone JC159 + CD45/APC , Clone 2D1 + CD71/FITC , Clone Ber-T9, MultiMix Triple-Color Reagent	30
		c-kit , see also: CD117, c-kit	
		Complement Receptor 3 , see: CD11b, C3bi Receptor	
X093101-2		Control Reagent, Mouse IgG1 , Unconjugated	33
X096801-2		Control Reagent, Mouse IgG1/APC	32
X092701-2		Control Reagent, Mouse IgG1/FITC	32
X092801-2		Control Reagent, Mouse IgG1/RPE	32
X095501-2		Control Reagent, Mouse IgG1/RPE-Cy5	32
X093250-2		Control Reagent, Mouse IgG1/FITC + Mouse IgG1/RPE , MultiMix Dual-Color	32
X094950-2		Control Reagent, Mouse IgG1/FITC + Mouse IgG2a/RPE , MultiMix Dual-Color	32
X097801-2		Control Reagent, Mouse IgG1/APC + Mouse IgG1/FITC + Mouse IgG1/RPE , MultiMix Triple-Color	32
X095650-2		Control Reagent, Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/RPE-Cy5 , MultiMix Triple-Color	33
X097901-2		Control Reagent, Mouse IgG1/FITC + Rabbit F(ab')₂/APC + Rabbit F(ab')₂/RPE , MultiMix Triple-Color	32
X093301-2		Control Reagent, Mouse IgG2a/FITC	32
X095001-2		Control Reagent, Mouse IgG2a/RPE	32
X099801-2		Control Reagent, Rabbit F(ab')₂/APC	32
X092901-2		Control Reagent, Rabbit F(ab')₂/FITC	32
X093001-2		Control Reagent, Rabbit F(ab')₂/RPE	32
X093550-2		Control Reagent, Rabbit F(ab')₂/FITC + Rabbit F(ab')₂/RPE , MultiMix Dual-Color	32
X095750-2		Control Reagent, Rabbit F(ab')₂/FITC + Rabbit F(ab')₂/RPE + Mouse IgG1/RPE-Cy5 , MultiMix Triple-Color	33

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E			
S236430-2		EasyLyse, Erythrocyte-Lysing Reagent (300 Tests)	34
F086001-2	Mo a Hu	Epithelial Antigen/FITC , Clone Ber-EP4	25
S236430-2		Erythrocyte-Lysing Reagent , EasyLyse (300 Tests)	34
F			
		Fc Gamma Receptor I , see: CD64, Fc Gamma Receptor I	
		Fc Gamma Receptor III , see: CD16, Fc Gamma Receptor III	
K231111-2		Fixation and Permeabilization Kit for Flow Cytometry, IntraStain (100 Tests)	34
K011011-2		FluoroSpheres, 6-Peak Calibration Beads for Daily Monitoring of the Flow Cytometer (40 Tests)	34
		FMC7 , see: B Cell, Clone FMC7	
G			
		Glycophorin A , see: CD235a, Glycophorin A	
		Glycoprotein Ib , see: CD42b, Platelet Glycoprotein Ib	
		Glycoprotein IIb , see: CD41, Platelet Glycoprotein IIb	
		Glycoprotein IIIa , see: CD61, Platelet Glycoprotein IIIa	
H			
R700001-2	Mo a Hu	HLA-ABC Antigen/RPE , Clone W6/32	25
F081701-2	Mo a Hu	HLA-DP, DQ, DR Antigen/FITC , Clone CR3/43	25
FR86750-2	Mo a Hu	HLA-DP, DQ, DR Antigen/FITC , Clone CR3/43 + CD3/RPE , Clone UCHT1, MultiMix Dual-Color	27
F726601-2	Mo a Hu	HLA-DR Antigen/FITC , Clone AB3	25
R726701-2	Mo a Hu	HLA-DR Antigen/RPE , Clone AB3	25
TC68501-2	Mo a Hu	HLA-DR Antigen/RPE , Clone AB3 + CD13/FITC , Clone WM-47 + CD117/APC , Clone 104D2, MultiMix Triple-Color Reagent	29
I			
		ICAM-1 , see: CD54, ICAM-1	
F018801-2	Rb a Hu	IgA/FITC , Rabbit F(ab') ₂	25
F018901-2	Rb a Hu	IgD/FITC , Rabbit F(ab') ₂	25
R511201-2	Rb a Hu	IgD/RPE , Rabbit F(ab') ₂	25
F018501-2	Rb a Hu	IgG/FITC , Rabbit F(ab') ₂	25
F005801-2	Rb a Hu	IgM/FITC , Rabbit F(ab') ₂	25
R511101-2	Rb a Hu	IgM/RPE , Rabbit F(ab') ₂	25
		IL-2R , see: CD25, Interleukin-2 Receptor	
F080101-2	Mo a Hu	Interleukin-2 Receptor , CD25/FITC , Clone ACT-1	21
R081101-2	Mo a Hu	Interleukin-2 Receptor , CD25/RPE, Clone ACT-1	21
K231111-2		IntraStain , Fixation and Permeabilization Kit for Flow Cytometry (100 Tests)	34
		Isotype Reagents , see: Control Reagents	
K			
C022201-2	Rb a Hu	Kappa Light Chains/APC , Rabbit F(ab') ₂	26
F043401-2	Rb a Hu	Kappa Light Chains/FITC , Rabbit F(ab') ₂	26
R043601-2	Rb a Hu	Kappa Light Chains/RPE , Rabbit F(ab') ₂	26
FR04850-2	a Hu	Kappa Light Chains/FITC , Rabbit F(ab') ₂ + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
FR48150-2	Rb a Hu	Kappa Light Chains/FITC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ , MultiMix Dual-Color	27
TC05150-2	a Hu	Kappa Light Chains/FITC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ + CD19/RPE-Cy5 , Clone HD37, MultiMix Triple-Color	31
TC66901-2	a Hu	Kappa Light Chains/APC , Rabbit F(ab') ₂ + CD19/FITC , Clone HD37 + Lambda Light Chains/RPE , Rabbit F(ab') ₂ , MultiMix Triple-Color	29
TC67001-2	a Hu	Kappa Light Chains/APC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ + Plasma Cell/FITC , Clone VS38c, MultiMix Triple-Color	31
		Ki-1 Antigen , see: CD30	
F726801-8	Mo a Hu	Ki-67 Antigen/FITC , Clone MIB-1	26
		KIT , see: CD117, c-kit	
L			
F043501-2	Rb a Hu	Lambda Light Chains/FITC , Rabbit F(ab') ₂	26
PR71250-2	Rb a Hu	Lambda Light Chains/PerCP-Cy5.5	26
R043701-2	Rb a Hu	Lambda Light Chains/RPE , Rabbit F(ab') ₂	26
FR04450-2	a Hu	Lambda Light Chains/FITC , Rabbit F(ab') ₂ + CD19/RPE , Clone HD37, MultiMix Dual-Color	27
FR48150-2	Rb a Hu	Lambda Light Chains/RPE , Rabbit F(ab') ₂ + Kappa Light Chains/FITC , Rabbit F(ab') ₂ , MultiMix Dual-Color	27

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TC66901-2	a Hu	Lambda Light Chains/RPE , Rabbit F(ab') ₂ + CD19/FITC , Clone HD37 + Kappa Light Chains/APC , Rabbit F(ab') ₂ , MultiMix Triple-Color	29
TC05150-2	a Hu	Lambda Light Chains/RPE , Rabbit F(ab') ₂ + Kappa Light Chains/FITC , Rabbit F(ab') ₂ + CD19/RPE-Cy5 , Clone HD37, MultiMix Triple-Color	31
TC67001-2	a Hu	Lambda Light Chains/RPE , Rabbit F(ab') ₂ + Kappa Light Chains/APC , Rabbit F(ab') ₂ + Plasma Cell/FITC , Clone VS38c, MultiMix Triple-Color	31
		LeuCAMb , see: CD11b, C3bi Receptor	
		LeuCAMc , see: CD11c, Protein 150,95	
		Leucocyte Common Antigen , see: CD45, Leucocyte Common Antigen	
		Leukosialin , see: CD43	
		Lewis X Antigen , see: CD15	
S236430-2		Lysing Reagent for Erythrocytes , EasyLyse (300 Tests)	34
F037201-2	Rb a Hu	Lysozyme EC 3.2.1.17/FITC	26
M			
		MHC-I , see: HLA-ABC Antigen	
		MHC-II , see: HLA-DP, DQ, DR Antigen	
		MIB-1 , see: Ki-67 Antigen, Clone MIB-1	
		MLA , see: CD103, Mucosa Lymphocyte Antigen	
X093101-2		Mouse IgG1 , Control Reagent	33
X096801-2		Mouse IgG1/APC , Control Reagent	32
X092701-2		Mouse IgG1/FITC , Control Reagent	32
X092801-2		Mouse IgG1/RPE , Control Reagent	32
X095501-2		Mouse IgG1/RPE-Cy5 , Control Reagent	32
X093250-2		Mouse IgG1/FITC + Mouse IgG1/RPE , Control Reagent, MultiMix Dual-Color	32
X097801-2		Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/APC , Control Reagent, MultiMix Triple-Color for Flow Cytometry	32
X095650-2		Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/RPE-Cy5 , Control Reagent, MultiMix Triple-Color	33
X094950-2		Mouse IgG1/FITC + Mouse IgG2a/RPE , Control Reagent, MultiMix Dual-Color	32
X097901-2		Mouse IgG1/FITC + Rabbit F(ab')₂/RPE + Rabbit F(ab')₂/APC , Control Reagent, MultiMix Triple-Color	32
X093301-2		Mouse IgG2a/FITC , Control Reagent	32
X095001-2		Mouse IgG2a/RPE , Control Reagent	32
F047902-2	Gt a	Mouse Immunoglobulins/FITC , Goat F(ab') ₂	33
R048001-2	Gt a	Mouse Immunoglobulins/RPE , Goat F(ab') ₂	33
F031302-2	Rb a	Mouse Immunoglobulins/FITC , Rabbit F(ab') ₂	33
R043901-2	Rb a	Mouse Immunoglobulins/RPE , Rabbit F(ab') ₂	33
		Mucosa Lymphocyte Antigen (MLA) , see: CD103, Mucosa Lymphocyte Antigen (MLA)	
		MultiMix Reagents	
		Muramidase , see: Lysozyme EC 3.2.1.17	
C724601-2	Mo a Hu	Myeloperoxidase/APC , Clone MPO-7	26
F071401-2	Mo a Hu	Myeloperoxidase/FITC , Clone MPO-7	26
PR70450-2	Mo a Hu	Myeloperoxidase/PerCP-Cy5.5 , Clone MPO-7	26
R720901-2	Mo a Hu	Myeloperoxidase/RPE , Clone MPO-7	26
TC66701-2	Mo a Hu	Myeloperoxidase/FITC, Clone MPO-7 + CD3/APC , Clone UCHT1 + CD79acy/RPE, Clone HM57, MultiMix Triple-Color	31
N			
		Neutral Endopeptidase 24.11 , see: CD10	
P			
K231111-2		Permeabilization and Fixation Kit for Flow Cytometry , IntraStain (100 Tests)	34
S302430-2		Phosphate-Buffered Saline (PBS) , pH 7.0 (6 x 1L)	33
F714901-2	Mo a Hu	Plasma Cell/FITC , Clone VS38c	26
TC67001-2	a Hu	Plasma Cell/FITC , Clone VS38c + Kappa Light Chains/APC , Rabbit F(ab') ₂ + Lambda Light Chains/RPE , Rabbit F(ab') ₂ , MultiMix Triple-Color	31
F710101-2	Mo a Hu	Plasma Cell, CD38/FITC , Clone AT13/5	22
R714401-2	Mo a Hu	Plasma Cell, CD38/RPE , Clone AT13/5	22
		Plasma Cell , see also: CD138, Clone MI15	
		Platelet Glycoprotein Ib , see: CD42b, Platelet Glycoprotein Ib	
		Platelet Glycoprotein IIb , see: CD41, Platelet Glycoprotein IIb	
		Platelet Glycoprotein IIIa , see: CD61, Platelet Glycoprotein IIIa	

Alphabetical Index

Code	Source	Product	See page
PR71350-2	Mo a Hu	Plasma Cell/PerCP-Cy5.5 , Clone VS38c	26
K532711-8		PNA Telomere Kit/FITC (20 Duplicate Tests)	35
F071301-2	Mo a Hu	Protein 150,95, CD11c/FITC , Clone KB90	20
Q			
K007811-8		QIFIKIT® (10 Calibrations)	34
R			
X099801-2		Rabbit F(ab')₂/APC , Control Reagent	32
X092901-2		Rabbit F(ab')₂/FITC , Control Reagent	32
X093001-2		Rabbit F(ab')₂/RPE , Control Reagent	32
X093550-2		Rabbit F(ab')₂/FITC + Rabbit F(ab')₂/RPE , Control Reagent, MultiMix Dual-Color	32
X095750-2		Rabbit F(ab')₂/FITC + Rabbit F(ab')₂/RPE + Mouse IgG1/RPE-Cy5 , Control Reagent, MultiMix Triple-Color	33
S			
		Sialophorin , see: CD43	
		Syndecan-1 , see: CD138	
T			
		TdT , see: Terminal Deoxynucleotidyl Transferase	
K532711-8		Telomere PNA Kit/FITC (20 Duplicate Tests)	35
F713950-2	Mo a Hu	Terminal Deoxynucleotidyl Transferase/FITC , Clone HT-6	26
TC66801-2	Mo a Hu	Terminal Deoxynucleotidyl Transferase/FITC , Clone HT-6 + CD3/APC , Clone UCHT1 + CD22/RPE , Clone 4KB128, MultiMix Triple-Color	31
F082901-2	Mo a Hu	Transferrin Receptor , CD71/FITC, Clone Ber-T9	23



Flow Cytometry Reagents

Flow cytometric immunophenotyping is an essential tool for the diagnosis of acute and chronic leukemia. The method is also applicable in connection with bone marrow or peripheral blood stem cell transplantation. Agilent Dako proudly develops premium-quality reagents for flow cytometry to help diagnose cancer and other diseases worldwide.

Hospitals and research laboratories rely on the high quality of our reagents to deliver trustworthy results, particularly in regards to leukemia immunophenotyping.

Single-Color Conjugates

Our range of high-quality, single-color conjugated antibodies for use in flow cytometry includes both polyclonal and monoclonal antibodies conjugated with either APC, FITC, PB, PerCP, PerCP-Cy5.5, RPE or RPE-Cy5.

MultiMix Panel

Our MultiMix panel is a comprehensive and carefully selected antibody-fluorochrome combinations panel. The antibody and fluorochrome combinations have been designed to gain the best sensitivity of the analysis on most flow cytometers. The MultiMix Triple-Color panels are composed of the well-established fluorochrome

antibody conjugates FITC, RPE and APC. The panels also include polyclonal kappa light chain conjugates and lambda light chain conjugates, known for their high quality and specificity.

Kits and Accessories

We offer kits for the study of telomeres, calibration and quantitative analysis, as well as lysing, fixation and permeabilization of cells.

Reagents Supplied

Reagents are supplied in liquid form with sodium azide as preservative. All conjugated monoclonal antibodies have been prepared from purified antibodies, while the majority of the polyclonal antibodies are affinity-isolated $F(ab)_2$ fragments.



Ensuring reliability, consistency and high quality

Our unique ability to develop and manufacture highly specific antibodies is grounded on a high-yielding rabbit population, which has been bred over the past 50 years – and is the foundation of our brand and premium-quality products.

Overview Tables

Overview, Single-Color Reagents, CE-IVD

Antibody Description		Available Form/Code						
Anti-Human	Clone	APC	FITC	PB	PerCP	PerCP-Cy5.5	RPE	RPE-Cy5
B Cell	FMC7		F7110001-2					
BCL2 Oncoprotein	124						R718901-2	
CD1a	NA1/34		F714101-2			PR71050-2	R080701-2	
CD2	MT910		F076701-2					
CD3	UCHT1	C722501-2	F081801-2		PR70201-2		R081001-2	C706701-2
CD4	MT310	C722601-2	F076601-2				R080501-2	
CD5	DK23	C724201-2	F079501-2				R084201-2	
CD7	CBC.37		F727601-2			PR71150-2	R727701-2	
CD7	DK24		F078901-2					
CD8	DK25	C722701-2	F076501-2				R080601-2	
CD10	SS2/36		F082601-2				R084801-2	
CD11c	KB90		F071301-2					
CD13	WM-47		F083101-2				R071501-2	
CD14	TÜK4		F084401-2				R086401-2	
CD15	C3D-1		F083001-2					
CD16	DJ130c		F701101-2				R701201-2	
CD19	HD37	C722401-2	F076801-2			PR70350-2	R080801-2	C706601-2
CD20	B-Ly1		F079901-2				R701301-2	
CD22	4KB128	C728101-2	F706001-2			PR70750-2	R706101-2	
CD23	MHM6		F706201-2				R710801-2	
CD24	SN3		F713401-2					
CD25	ACT-1		F080101-2				R081101-2	
CD30	Ber-H2		F084901-2					
CD33	WM-54		F083201-2				R074501-2	
CD34 Class III	BIRMA-K3	C723850-2	F708101-2			PR70650-2	R712501-2	
CD38	AT13/5		F710101-2				R714401-2	
CD41	5B12		F708801-2				R705801-2	
CD42b	AN51						R701401-2	
CD43	DF-T1		F710201-2					
CD45	2D1				PR70101-2			
CD45	T29/33	C723001-2	F086101-2				R708701-2	C709901-2
CD45R0	UCHL1		F080001-2				R084301-2	
CD45RA	4KB5						R708601-2	
CD56	C5.9						R725101-2	
CD56	MOC-1						R712701-2	
CD57	TB01		F727001-2					
CD61	Y2/51	C728001-2	F080301-2					
CD64	10.1	C727801-2					R721901-2	
CD66abce	Kat4c		F711201-2					
CD68	KP1		F713501-2					
CD71	Ber-T9		F082901-2					
CD79acy	HM57	C725201-2					R715901-2	
CD79β	SN8		F713701-2				R727201-2	
CD103	Ber-ACT8		F713801-2				R718801-2	
CD117	104D2	C724401-2					R714501-2	
CD138	MI15	C725601-2					R722901-2	
CD235a	JC159		F087001-2				R707801-2	
Epithelial Antigen	Ber-EP4		F086001-2					
HLA-ABC Antigen	W6/32						R700001-2	

Overview, Single-Color Reagents, CE-IVD

Antibody Description		Available Form/Code						
Anti-Human	Clone	APC	FITC	PB	PerCP	PerCP-Cy5.5	RPE	RPE-Cy5
HLA-DP, DQ, DR Antigen	CR3/43		F081701-2					
HLA-DR Antigen	AB3		F726601-2				R726701-2	
IgA*	Polyclonal Rabbit		F018801-2					
IgD*	Polyclonal Rabbit		F018901-2				R511201-2	
IgG*	Polyclonal Rabbit		F018501-2					
IgM*	Polyclonal Rabbit		F005801-2				R511101-2	
Kappa Light Chains*	Polyclonal Rabbit	C022201-2	F043401-2				R043601-2	
Lambda Light Chains*	Polyclonal Rabbit		F043501-2			PR71250-2	R043701-2	
Lysozyme	Polyclonal Rabbit		F037201-2					
Myeloperoxidase	MPO-7	C724601-2	F071401-2			PR70450-2	R720901-2	
Plasma Cell	VS38c		F714901-2			PR71350-2		
Terminal Deoxynucleotidyl Transferase	HT-6	F713950-2						

* F(ab')₂ fragment of affinity-isolated antibody

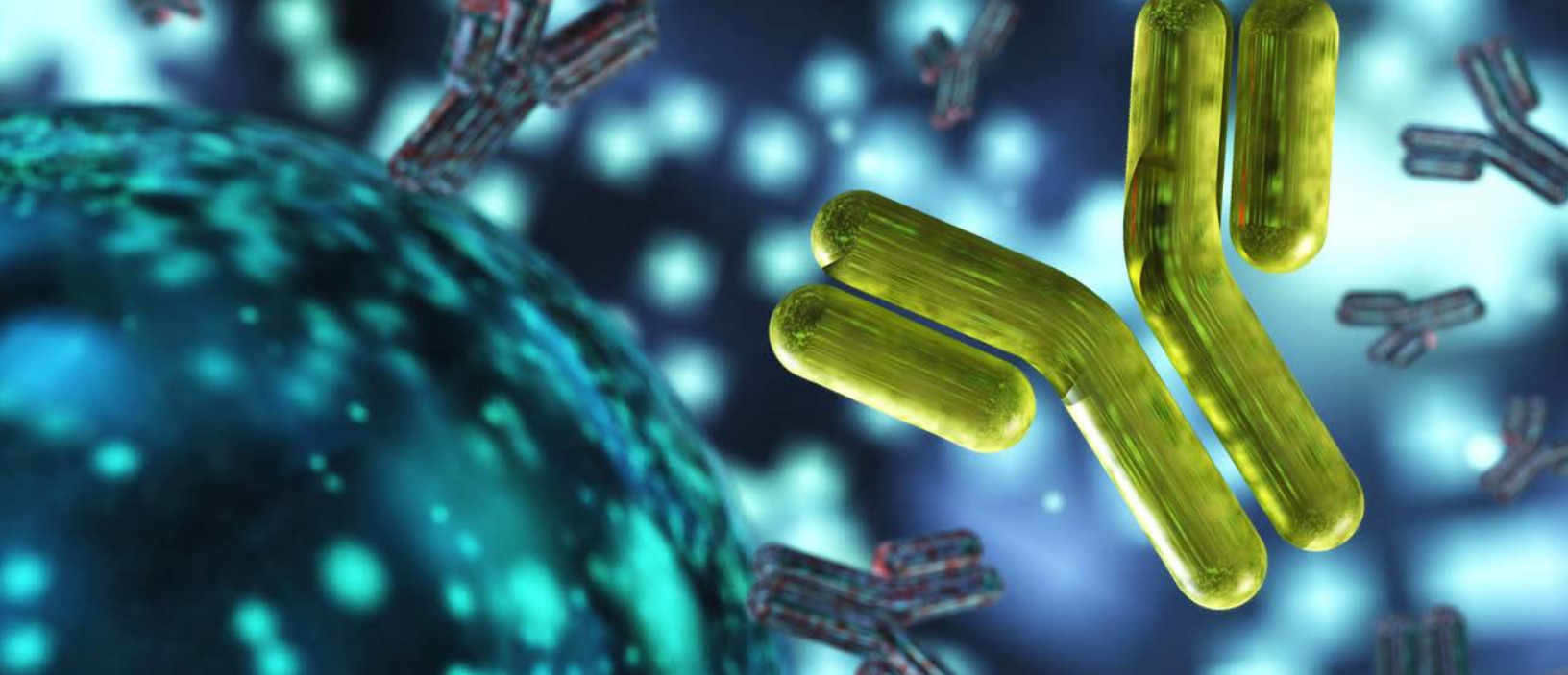
Overview, Single-Color Reagents, RUO*

Antibody Description		Available Form/Code						
Anti-Human	Clone	APC	FITC	PB	PerCP	PerCP-Cy5.5	RPE	RPE-Cy5
BCL2 Oncoprotein	124		F705301-8					
CD3	UCHT1			PB98201-8				
CD8	DK25			PB98401-8				
CD11b	2LPM19c						R084101-8	
CD19	HD37			PB98501-8				
CD27	M-T271		F717801-8					
CD28	CD28.1						R716401-8	
CD45	T29/33			PB98601-8				
CD54	6.5B5		F714301-8					
Ki-67 Antigen	MIB-1		F726801-8					

* For Research Use Only. Not for use in diagnostic procedures.

Overview, Control Reagents for Single-Color Reagents, CE-IVD

Control Reagent	Available Form/Code			
	APC	FITC	RPE	RPE-Cy5
Mouse IgG1	X096801-2	X092701-2	X092801-2	X095501-2
Mouse IgG2a		X093301-2	X095001-2	
Rabbit F(ab')₂	X099801-2	X092901-2	X093001-2	



Overview, Dual-Color Reagents, CE-IVD

Anti-Human	Clones	Code
CD2/FITC CD19/RPE	MT910 HD37	FR89450-2
CD3/FITC CD4/RPE	UCHT1 MT310	FR87550-2
CD3/FITC CD8/RPE	UCHT1 DK25	FR88150-2
CD3/FITC CD19/RPE	UCHT1 HD37	FR86650-2
CD4/FITC CD8/RPE	MT310 DK25	FR86850-2
CD5/FITC CD19/RPE	DK23 HD37	FR88250-2
CD5/FITC CD20/RPE	DK23 B-Ly1	FR72950-2
CD10/FITC CD19/RPE	SS2/36 HD37	FR88350-2
CD45/FITC CD14/RPE	T29/33 TÜK4	FR70050-2
HLA-DP, DQ, DR Antigen/FITC CD3/RPE	CR3/43 UCHT1	FR86750-2
Kappa Light Chains/ FITC* CD19/RPE	Polyclonal Rabbit HD37	FR04850-2
Kappa Light Chains/ FITC* Lambda Light Chains/RPE*	Polyclonal Rabbit Polyclonal Rabbit	FR48150-2
Lambda Light Chains/FITC* CD19/RPE	Polyclonal Rabbit HD37	FR04450-2

* F(ab')₂ fragment of affinity-isolated antibody

Overview, Control Reagents for Dual-Color Reagents, CE-IVD

Anti-Human	Code
Mouse IgG1/FITC + Mouse IgG1/RPE	X093250-2
Mouse IgG1/FITC + Mouse IgG2a/RPE	X094950-2
Rabbit F(ab')₂/FITC + Rabbit F(ab')₂/RPE	X093550-2

Overview, Triple-Color Reagents

FITC/RPE/APC Reagent Line, CE-IVD

Anti-Human	Clones	Code
B Cell (FMC7)/FITC CD23/RPE CD19/APC	FMC7 MHM6 HD37	TC68301-2
CD2/FITC CD7/RPE CD3/APC	MT910 CBC.37 UCHT1	TC67701-2
CD2/FITC CD34 Class III/RPE CD5/APC	MT910 BIRMA-K3 DK23	TC66601-2
CD3/FITC CD19/RPE CD45/APC	UCHT1 HD37 2D1	TC69001-2
CD5/FITC CD10/RPE CD19/APC	DK23 SS2/36 HD37	TC66401-2
CD8/FITC CD4/RPE CD3/APC	DK25 MT310 UCHT1	TC66001-2
CD13/FITC HLA-DR Antigen/RPE CD117/APC	WM-47 AB3 104D2	TC68501-2
CD16/FITC_c CD56/RPE CD3/APC	DJ130 C5.9 UCHT1	TC66101-2
CD19/FITC CD34/RPE CD22/APC	HD37 BIRMA-K3 4KB128	TC68901-2
CD19/FITC Lambda Light Chains/RPE* Kappa Light Chains/APC*	HD37 Polyclonal Rabbit Polyclonal Rabbit	TC66901-2

Anti-Human	Clones	Code
CD20/FITC CD5/RPE CD19/APC	B-Ly1 DK23 HD37	TC66301-2
CD33/FITC CD34/RPE CD117/APC	WM-54 BIRMA-K3 104D2	TC68601-2
CD38/FITC CD56/RPE CD19/APC	AT13/5 C5.9 HD37	TC67401-2
CD38/FITC CD56/RPE CD45/APC	AT13/5 C5.9 2D1	TC67101-2
CD41/FITC CD34/RPE CD61/APC	C687 BIRMA-K3 Y2/51	TC68701-2
CD71/FITC CD235a/RPE CD45/APC	Ber-T9 JC159 2D1	TC67501-2
CD103/FITC CD11c/RPE CD19/APC	Ber-ACT8 KB90 HD37	TC66501-2
MPO/FITC CD79_{acy}/RPE CD3/APC	MPO-7 HM57 UCHT1	TC66701-2
Plasma Cell/FITC Lambda Light Chains/RPE* Kappa Light Chains/APC*	VS38c Polyclonal Rabbit Polyclonal Rabbit	TC67001-2
TdT/FITC CD22/RPE CD3/APC	HT-6 4KB128 UCHT1	TC66801-2

* F(ab)₂ fragment of affinity-isolated antibody

FITC/RPE/RPE-Cy5 Reagent Line, CE-IVD

Anti-Human	Clones	Code
CD8/FITC CD4/RPE CD3/RPE-Cy5	DK25 MT310 UCHT1	TC64150-2
Kappa Light Chains/FITC* Lambda Light Chains/RPE* CD19/RPE-Cy5	Polyclonal Rabbit Polyclonal Rabbit HD37	TC05150-2

* F(ab)₂ fragment of affinity-isolated antibody

Overview, Control Reagents for Triple-Color Reagents

FITC/RPE/APC Reagent Line, CE-IVD

Control Reagent	Code
Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/APC	X097801-2
Mouse IgG1/FITC + Rabbit F(ab') ₂ /RPE + Rabbit F(ab') ₂ /APC	X097901-2

FITC/RPE/RPE-Cy5 Reagent Line, CE-IVD

Control Reagent	Code
Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/RPE-Cy5	X095650-2
Rabbit F(ab') ₂ /FITC + Rabbit F(ab') ₂ /RPE + Mouse IgG1/RPE-Cy5	X095750-2

Overview, Secondary Antibody Conjugates, CE-IVD

Antibody Description		Available Form/Code	
Anti-Mouse	Clone	FITC	RPE
Immunoglobulins	Polyclonal Goat	F047902-2	R048001-2
Immunoglobulins	Polyclonal Rabbit	F031302-2	R043901-2



Reagents & Kits

Single-Color Reagents

These primary antibodies are conjugated with a single fluorochrome for use in flow cytometry. After conjugation, unreacted fluorochromes are completely removed by gel filtration. Below is a list of the excitation and emission wavelength of the different fluorochromes as well as the approximate molar fluorochrome/antibody ratio for each fluorochrome.

Allophycocyanin (APC) Conjugates

The molar APC/antibody ratio is approximately 1. APC conjugates can be excited at 633 nm or 635 nm (red lasers), and emit light at 660 nm.

Fluorescein (FITC) Conjugates

The molar FITC/antibody ratio is approximately 4. FITC conjugates can be excited at 488 nm (blue laser) and emit light at 530 nm.

Pacific Blue (PB) Conjugates

The molar PB/antibody ratio is approximately 6. PB conjugates can be excited at 406 nm (violet laser) and emit light at 456 nm.

Monoclonal Mouse Anti-Human B Cell Clone: FMC7 • Isotype: IgM, kappa			
CE	F711001-2	FITC. Purified	100 tests, 1 mL

The target for this antibody is probably a conformational epitope on CD20. The antibody labels a subpopulation of functionally mature B cells, and together with a panel of other antibodies it is considered essential for the initial evaluation of B-cell chronic lymphoproliferative disorders.

Monoclonal Mouse Anti-Human BCL2 Oncoprotein Clone: 124 • Isotype: IgG1, kappa			
RUO	F705301-8	FITC. Purified	100 tests, 1 mL

Reacts with the BCL2 oncoprotein encoded by a gene involved in the t(14;18) chromosomal translocation. The BCL2 oncoprotein plays a central role in apoptosis (programmed cell death), acting as an inhibitor of the apoptotic process, and it has given name to a family of proteins engaged in the promotion/inhibition of apoptosis (1).

Reference:

1. Chao DT, Korsmeyer SJ. BCL-2 family: regulators of cell death. Annu Rev Immunol 1998;16:395-419.

Peridinin Chlorophyll Protein Complex (PerCP) Conjugates

The molar PerCP/antibody ratio is approximately 2. PerCP conjugates can be excited at 488 nm (blue laser) and emit light at 676 nm.

Peridinin Chlorophyll Protein Complex-Cy5.5 (PerCP-Cy5.5) Conjugates

The molar PerCP-Cy5.5/antibody ratio of the conjugate is approximately 1. The excitation energy, absorbed at 488 nm by PerCP is transferred to Cy5.5, which emits light at 695 nm.

R-Phycoerythrin (RPE) Conjugates

The molar RPE/antibody ratio is approximately 1. RPE conjugates can be excited at 488 nm (blue laser) and emit light at 570 nm.

Phycoerythrin-Cy5 (RPE-Cy5) Conjugates

The molar RPE-Cy5/antibody ratio of the conjugate is approximately 1. The excitation energy, absorbed at 488 nm by RPE, is transferred to Cy5, which emits light at 670 nm.

C3bi Receptor			
See: CD11b, C3bi Receptor			

Monoclonal Mouse Anti-Human CD1a Clone: NA1/34 • Isotype: IgG2a, kappa			
CE	F714101-2	FITC. Purified	100 tests, 1 mL
CE	PR71050-2	PerCP-Cy5.5. Purified	100 tests, 0.5 mL
CE	R718901-2	RPE. Purified	100 tests, 1 mL

The CD1a antigen is a transmembrane α -chain non-covalently associated with β -2-microglobulin. CD1a is expressed by cortical thymocytes and Langerhans' cells in normal, dysplastic and neoplastic tissue.

Monoclonal Mouse Anti-Human CD2 Clone: MT910 • Isotype: IgG1, kappa			
CE	F076701-2	FITC. Purified	100 tests, 1 mL
CE	R080701-2	RPE. Purified	100 tests, 1 mL
Reacts with virtually all thymocytes, T lymphocytes and NK cells. CD2 is a valuable pan-T marker for normal and neoplastic T cells.			

Monoclonal Mouse Anti-Human CD3 Clone: UCHT1 • Isotype: IgG1, kappa			
CE	C722501-2	APC. Purified	100 tests, 1 mL
CE	F081801-2	FITC. Purified	100 tests, 1 mL
RUO	PB98201-8	Pacific Blue. Purified	100 tests, 1 mL
CE	PR70201-2	PerCP. Purified	100 tests, 1 mL
CE	R081001-2	RPE. Purified	100 tests, 1 mL
CE	C706701-2	RPE-Cy5. Purified	100 tests, 1 mL
Anti-CD3, UCHT1, reacts with the ε-chain of the CD3 part of the TCR/CD3 complex. The antibody is a pan-T reagent for the detection of normal and neoplastic T cells.			

Monoclonal Mouse Anti-Human CD4 Clone: MT310 • Isotype: IgG1, kappa			
CE	C722601-2	APC. Purified	100 tests, 1 mL
CE	F076601-2	FITC. Purified	100 tests, 1 mL
CE	R080501-2	RPE. Purified	100 tests, 1 mL
CD4 is a 55 kDa transmembrane glycoprotein expressed by helper/inducer T cells, 55-65% of mature peripheral blood T cells and by thymocyte subsets. CD4 is also expressed by monocytes/macrophages, Langerhans' cells and other dendritic cells. CD4 is not expressed by B cells.			

Monoclonal Mouse Anti-Human CD5 Clone: DK23 • Isotype: IgG1, kappa			
CE	C724201-2	APC. Purified	100 tests, 1 mL
CE	F079501-2	FITC. Purified	100 tests, 1 mL
CE	R084201-2	RPE. Purified	100 tests, 1 mL
CD5 is a 67 kDa transmembrane glycoprotein. CD5 appears early in thymocyte development and is expressed at low density on thymocytes and at high density on all mature T lymphocytes. CD5 is also expressed on a subpopulation of normal B cells. Antibodies to CD5 are well-suited for detecting normal and neoplastic T and B cells, e.g. in chronic lymphocytic leukemia and centrocytic lymphoma. A review on CD5+ B cells is given in reference 1. Reference: 1. Hardy RR, Hayakawa K. CD5 B-cells, a fetal B-cell lineage. Adv Immunol 1994;55:297-339.			

Monoclonal Mouse Anti-Human CD7 Clone: CBC.37 • Isotype: IgG2b, kappa			
CE	F727601-2	FITC. Purified	100 tests, 1 mL
CE	PR71150-2	PerCP-Cy5.5. Purified	100 tests, 0.5 mL
CE	R727701-2	RPE. Purified	100 tests, 1 mL

CD7 is a 40 kDa membrane-bound glycoprotein expressed on thymocytes, mature T cells, a large majority of natural killer cells, pluripotent hematopoietic stem cells, and progenitor cells of lymphoid and myeloid cells. CD7 is the earliest T-cell specific antigen to be expressed by lymphocytes and the only early marker to persist throughout differentiation. In flow cytometry, F727601-2 labels CD7+ cells with a higher fluorescence intensity than F078901-2 and provides a better separation between positive and negative cells.

Monoclonal Mouse Anti-Human CD7 Clone: DK24 • Isotype: IgG2b, kappa			
CE	F078901-2	FITC. Purified	100 tests, 1 mL
CD7 is a 40 kDa membrane-bound glycoprotein expressed on thymocytes, mature T cells, a large majority of natural killer cells, pluripotent hematopoietic stem cells, and progenitor cells of lymphoid and myeloid cells. CD7 is the earliest T-cell specific antigen to be expressed by lymphocytes and the only early marker to persist throughout differentiation.			

Monoclonal Mouse Anti-Human CD8 Clone: DK25 • Isotype: IgG1, kappa			
CE	C722701-2	APC. Purified	100 tests, 1 mL
CE	F076501-2	FITC. Purified	100 tests, 1 mL
RUO	PB98401-8	Pacific Blue. Purified	100 tests, 1 mL
CE	R080601-2	RPE. Purified	100 tests, 1 mL

CD8 is a 68 kDa transmembrane glycoprotein expressed by class I major histocompatibility complex restricted, mature suppressor/cytotoxic T cells, the great majority of cortical thymocytes and approximately 30% of medullary thymocytes. In addition a proportion of γδ T cells and NK cells express CD8.

Monoclonal Mouse Anti-Human CD10 Clone: SS2/36 • Isotype: IgG1, kappa			
CE	F082601-2	FITC. Purified	100 tests, 1 mL
CE	R084801-2	RPE. Purified	100 tests, 1 mL

CD10 is a 100 kDa transmembrane protein. CD10 is expressed on immature T and B-precursor cells but is lost as the cells reach maturation. In lymphoid malignancies, CD10 is expressed in acute lymphoblastic leukemia (ALL) arising from precursor B cells, but is also observed in a proportion of T-cell ALL. Additionally, it is expressed selectively in mature B-cell leukemia, including multiple myeloma, and in lymphomas.

Single-Color Reagents

Monoclonal Mouse Anti-Human CD11b, C3bi Receptor Clone: 2LPM19c • Isotype: IgG1, kappa			
RUO	R084101-8	RPE. Purified	100 tests, 1 mL

Reacts specifically with a leucocyte surface receptor (CR3) for the C3bi complement fragment. CD11b is expressed by most granulocytes and monocytes as well as a subpopulation of 'null cell' peripheral lymphocytes containing most of the circulating natural killer cells and by neoplastic cells in myelomonocytic and monocytic leukemia and, less frequently, in acute myeloid leukemia. CD11b (Mac-1) is the specific α -chain in the CD11b/CD18 molecule, which is a member of the LFA-1 and β 2 integrin subfamilies.

Monoclonal Mouse Anti-Human CD11c, Protein 150,95 Clone: KB90 • Isotype: IgG1, kappa			
CE	F071301-2	FITC. Purified	100 tests, 1 mL

The antibody is directed against the CD11c chain of the CD11c/CD18 protein, which is an adhesion molecule of integrin type (integrin α X β 2). An alternative name is complement receptor type 4 or CR4. CD11c is expressed by a variety of cells, including granulocytes, monocytes, macrophages, NK cells, dendritic cells, hairy leukemia cells and malignant cells from B-cell lymphocytic leukemia.

Monoclonal Mouse Anti-Human CD13 Clone: WM-47 • Isotype: IgG1, kappa			
CE	F083101-2	FITC. Purified	100 tests, 1 mL
CE	R071501-2	RPE. Purified	100 tests, 1 mL

CD13 is identical to aminopeptidase N. CD13 is expressed by committed granulocyte-monocyte progenitor (CFU-GM) cells, and normal granulocytic and monocytic cells at all stages of differentiation. Lymphocytes and platelets do not express CD13. Together with a panel of other antibodies, the CD13 antibody is considered essential for the initial evaluation of acute myeloid leukemias.

Monoclonal Mouse Anti-Human CD14 Clone: TÜK4 • Isotype: IgG2a, kappa			
CE	F084401-2	FITC. Purified	100 tests, 1 mL
CE	R086401-2	RPE. Purified	100 tests, 1 mL

CD14 is a 55 kDa protein, which functions as a receptor for the complex of lipopolysaccharide (LPS) and LPS-binding protein (LPB). CD14 is primarily expressed on monocytes and macrophages. The antibody is of value in the detection of normal and neoplastic cells of the monocytic cell lineage, and in the immunophenotyping of acute myeloid leukemia.

Reference:

1. Wright SD, Ramos RA, Tobias PS, Ulevitch RJ, Mathison JC. CD14, a receptor for complexes of lipopolysaccharide (LPS) and LPS binding protein. Science 1990;249:1431-3.

Monoclonal Mouse Anti-Human CD15 Clone: C3D-1 • Isotype: IgM, kappa			
CE	F083001-2	FITC. Purified	100 tests, 1 mL

Reacts with an oligosaccharide termed Lewis X (Le^x), or CD15, found on mature granulocytes and monocytes. Together with a panel of other antibodies, anti-CD15 is essential for the initial evaluation of acute myeloid leukemias.

Monoclonal Mouse Anti-Human CD16, Fc Gamma Receptor III Clone: DJ130c • Isotype: IgG1, kappa			
CE	F701101-2	FITC. Purified	100 tests, 1 mL
CE	R701201-2	RPE. Purified	100 tests, 1 mL

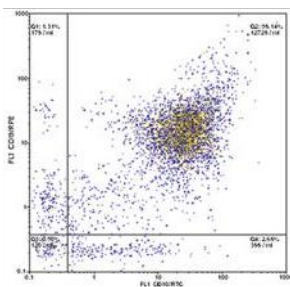
Reacts with an antigen (Fc γ RIII) present on NK cells, neutrophils and basophils in peripheral blood and bone marrow.

Monoclonal Mouse Anti-Human CD19 Clone: HD37 • Isotype: IgG1, kappa			
CE	C722401-2	APC. Purified	100 tests, 1 mL
CE	F076801-2	FITC. Purified	100 tests, 1 mL
RUO	PB98501-8	Pacific Blue. Purified	100 tests, 1 mL
CE	PR70350-2	PerCP-Cy5.5. Purified	100 tests, 0.5 mL
CE	R080801-2	RPE. Purified	100 tests, 1 mL
CE	C706601-2	RPE-Cy5. Purified	100 tests, 1 mL

CD19 is the broadest lineage-specific surface marker for B cells. CD19 is present on the surface of virtually all B lymphocytes, including early B progenitor cells (1), but it is lost upon terminal differentiation to plasma cells (2). CD19 is also expressed on follicular dendritic cells (1). B-lineage leukemias and lymphomas rarely lose the CD19 antigen (3).

References:

1. Pezzuto A, Dörken B, Feller A, Moldenhauer G, Schwartz R, Wernet P, et al. HD37 monoclonal antibody: a useful reagent for further characterization of 'non-T, non-B' lymphoid malignancies. In: Reinherz EL, Haynes BF, Nadler LM, Bernstein ID, editors. Leucocyte typing II. Proceedings of the 2nd International Workshop on Human Leukocyte Differentiation Antigens; 1984 Sept 17-20; Boston, USA, New York, Berlin, Heidelberg, Tokyo: Springer-Verlag; 1986. Volume 2, p. 391-402.
2. Sato S, Tedder TF. BC3. CD19 workshop panel report. In: Kishimoto T, Kikutani H, von dem Borne AEG, Goyert SM, Mason DY, Miyasaka M, et al., editors. Leucocyte typing VI. White cell differentiation antigens. Proceedings of the 6th International Workshop and Conference; 1996 Nov 10-14; Kobe, Japan. New York, London: Garland Publishing Inc.; 1997. p. 133-5.
3. Scheuermann RH, Racila E. CD19 antigen in leukaemia and lymphoma diagnosis and immunotherapy (review). Leuk Lymphoma 1995;18:385-97.



Cells from a case of acute lymphoblastic leukemia stained with Anti-CD10/FITC, Code F082601-2, and Anti-CD19/RPE, Code R080801-2.

Monoclonal Mouse Anti-Human CD20 Clone: B-Ly1 • Isotype: IgG1, kappa			
CE	F079901-2	FITC. Purified	100 tests, 1 mL
CE	R701301-2	RPE. Purified	100 tests, 1 mL

Reacts with an epitope located on the surface of B cells. CD20 appears early during B-cell maturation and is lost shortly before the terminal plasma cell stage.

Single-Color Reagents

Monoclonal Mouse Anti-Human CD22 Clone: 4KB128 • Isotype: IgG1, kappa			
CE	C728101-2	APC. Purified	100 tests, 1 mL
CE	F706001-2	FITC. Purified	100 tests, 1 mL
CE	PR70750-2	PerCP-Cy5.5. Purified	100 tests, 0.5 mL
CE	R706101-2	RPE. Purified	100 tests, 1 mL

CD22 appears in the cytoplasm of late pro and early pre-B cells and on the surface of mature B lymphocytes. Anti-CD22 is a pan-B reagent that enables detection of normal and neoplastic B cells in peripheral blood.

Monoclonal Mouse Anti-Human CD23 Clone: MHM6 • Isotype: IgG1, kappa			
CE	F706201-2	FITC. Purified	100 tests, 1 mL
CE	R710801-2	RPE. Purified	100 tests, 1 mL

CD23, the low affinity IgE (Fc-epsilon) receptor, is a glycoprotein present on a subpopulation of B lymphocytes in germinal centres, and on EBV-transformed B-lymphoblastoid cell lines. CD23 is also expressed on monocytes and dendritic cells.

Monoclonal Mouse Anti-Human CD24 Clone: SN3 • Isotype: IgG1, kappa			
CE	F713401-2	FITC. Purified	100 tests, 1 mL

Reacts with an antigen expressed at multiple stages of B-cell development, beginning with early progenitor cells and continuing through maturation. The antigen is lost as cells differentiate to plasma cells.

Monoclonal Mouse Anti-Human CD25, Interleukin-2 Receptor Clone: ACT-1 • Isotype: IgG1, kappa			
CE	F080101-2	FITC. Purified	100 tests, 1 mL
CE	R081101-2	RPE. Purified	100 tests, 1 mL

CD25 is the low-affinity α -chain of the interleukin-2 receptor that has at least 3 subunits (α , β , γ). The CD25 antigen is expressed on activated T and B cells and activated macrophages. The antibody is of value in the study of activated lymphoid cells in normal and pathological specimens.

Monoclonal Mouse Anti-Human CD27 Clone: M-T271 • Isotype: IgG1, kappa			
RUO	F717801-8	FITC. Purified	100 tests, 1 mL

CD27 is a transmembrane antigen expressed on the majority of human peripheral blood T cells, on a subpopulation of B cells, and on a portion of natural killer (NK) cells. CD27 acts in a co-stimulatory fashion with the ligand, CD70. During activation, the expression of CD27 is increased on B cells and unprimed T cells. The antibody is valuable for the study of B and T-cell activation and differentiation.

Monoclonal Mouse Anti-Human CD28 Clone: CD28.1 • Isotype: IgG1, kappa			
RUO	R716401-8	RPE. Purified	100 tests, 1 mL

CD28 is a T-cell surface molecule expressed on approximately 95% of CD4+ and 50% of CD8+ peripheral T cells. CD28 mediates adhesion to activated B cells through the ligands CD80 and CD86, and is believed to play an important role in the interaction between T and B cells. Enumeration of CD8+ CD28+ T cells may be of relevance in the study of HIV-1 infection, since anti-HIV activity predominantly resides in this subset.

Monoclonal Mouse Anti-Human CD30 Clone: Ber-H2 • Isotype: IgG1, kappa			
CE	F084901-2	FITC. Purified	100 tests, 1 mL

CD30 is consistently expressed by Reed-Sternberg cells in Hodgkin's disease. It is also present in certain non-Hodgkin's lymphomas, e.g. anaplastic large cell lymphoma (ALCL), adult T-cell lymphoma/leukemia (ATLL), and, occasionally, in other types.

Monoclonal Mouse Anti-Human CD33 Clone: WM-54 • Isotype: IgG1, kappa			
CE	F083201-2	FITC. Purified	100 tests, 1 mL
CE	R074501-2	RPE. Purified	100 tests, 1 mL

CD33 is a member of the Siglec family (sialic acid binding Ig-like lectins) and is also referred to as Siglec-3. The main cellular expression of CD33 is in myeloid progenitors, monocytes/macrophages and in granulocyte progenitors, while the expression is low in mature granulocytes. Together with a panel of other antibodies, the CD33 antibody is considered essential for the initial evaluation of acute myeloid leukemia (AML). The fluorescence intensity of RPE conjugates is, generally, somewhat higher than that of corresponding FITC conjugates. As CD33 is one of the more weakly expressed antigens, the use of R074501-2 may be preferred to F083201-2 in some situations.

Monoclonal Mouse Anti-Human CD34 Class III Clone: BIRMA-K3 • Isotype: G1, kappa			
CE	C723850-2	APC. Purified	50 tests, 0.5 mL
CE	F708101-2	FITC. Purified	100 tests, 1 mL
CE	PR70650-2	PerCP-Cy5.5 Purified	100 tests, 0.5 mL
CE	R712501-2	RPE. Purified	100 tests, 1 mL

Reacts with an antigen present on immature hematopoietic cells. The antibody is of value in the identification of hematopoietic progenitor cells, and in the immunophenotyping of leukemias. R712501-2 is recommended in particular for the labeling of hematopoietic progenitor cells.

Single-Color Reagents

Monoclonal Mouse Anti-Human CD38 Clone: AT13/5 • Isotype: IgG1, kappa			
CE	F710101-2	FITC. Purified	100 tests, 1 mL
CE	R714401-2	RPE. Purified	100 tests, 1 mL

CD38 is expressed on plasma cells, on early cells of B and T cell lineages, and on activated B and T cells. Approximately 60% of peripheral blood mononuclear CD34+ cells express CD38. The least mature CD34+ cells are characterized by a lack of CD38. The antibody is of value for immunophenotyping of acute leukemias, and in research studies on the role of activated T cells in immunodeficiency diseases and in autoimmune diseases.

Monoclonal Mouse Anti-Human CD41, Platelet Glycoprotein IIb Clone: 5B12 • Isotype: IgG1, kappa			
CE	F708801-2	FITC. Purified	100 tests, 1 mL
CE	R705801-2	RPE. Purified	100 tests, 1 mL

CD41 is a 135 kDa protein which is a selective marker of platelets and platelet precursors. CD41 is expressed to a variable degree in megakaryoblastic/cytic leukemias. It is absent from, or defective on the platelets of patients suffering from Glanzmann's thrombasthenia.

Monoclonal Mouse Anti-Human CD42b, Platelet Glycoprotein Ib Clone: AN51 • Isotype: IgG2a, kappa			
CE	R701401-2	RPE. Purified	100 tests, 1 mL

CD42b is a 145 kDa protein restricted to platelets and megakaryocytes. CD42a, CD42b, CD42c and CD42d form a complex in the platelet plasma membrane which serves as a receptor for von Willebrand factor and thrombin, and mediates adhesion of platelets to subendothelial matrices exposed upon damage to the endothelium. The binding sites for von Willebrand factor and thrombin lies on CD42b.

Monoclonal Mouse Anti-Human CD43 Clone: DF-T1 • Isotype: IgG1, kappa			
CE	F710201-2	FITC. Purified	100 tests, 1 mL

Reacts with a heavily glycosylated transmembrane protein, also called leucosialin. CD43 is expressed on virtually all leucocytes.

Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen Clone: 2D1 • Isotype: IgG1, kappa			
CE	PR70101-2	PerCP. Purified	100 tests, 1 mL

The antibody is intended for use in the identification of cells expressing CD45. CD45 is one of the most abundant leucocyte cell surface glycoproteins and is expressed exclusively on cells of the hematopoietic system and their progenitors (1). In flow cytometry, anti-CD45, together with a panel of other antibodies, is considered essential for the initial evaluation of chronic lymphoproliferative disorders and acute leukemias (2).

References:

1. Leong AS-Y, Cooper K, Leong FJW-M. Manual of diagnostic antibodies for immunohistology. London: Oxford University Press;1999. p. 95-8.
2. Braylan RC, Orfao A, Borowitz MJ, Davis BH. Optimal number of reagents required to evaluate hematolymphoid neoplasias: results of an international consensus meeting. Cytometry 2001;46:23-7.

Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen Clone: T29/33 • Isotype: IgG1, kappa			
CE	C723001-2	APC. Purified	100 tests, 1 mL
CE	F086101-2	FITC. Purified	100 tests, 1 mL
RUO	PB98601-8	Pacific Blue. Purified	100 tests, 1 mL
CE	R708701-2	RPE. Purified	100 tests, 1 mL
CE	C709901-2	RPE-Cy5. Purified	100 tests, 1 mL

Labels the cell membrane of almost all leucocytes. The expression of CD45 on the surface of mature granulocytes is less than that of lymphocytes.

Monoclonal Mouse Anti-Human CD45R0 Clone: UCHL1 • Isotype: IgG2a, kappa			
CE	F080001-2	FITC. Purified	100 tests, 1 mL
CE	R084301-2	RPE. Purified	100 tests, 1 mL

Reacts with an epitope unique for CD45R0. The antibody labels most thymocytes, a subpopulation of resting T cells within both CD4 and CD8 subsets and mature, activated T cells.

Monoclonal Mouse Anti-Human CD45RA Clone: 4KB5 • Isotype: IgG1, kappa			
CE	R708601-2	RPE. Purified	100 tests, 1 mL

Reacts with the CD45 isoforms, ABC and AB. The antibody labels most B cells in peripheral blood and tissue sections.

Monoclonal Mouse Anti-Human CD54, ICAM-1 Clone: 6.5B5 • Isotype: IgG1, kappa			
RUO	F714301-8	FITC. Purified	100 tests, 1 mL

Reacts with the cell surface glycoprotein ICAM-1. ICAM-1 (intercellular adhesion molecule-1) is expressed mainly on monocytes and endothelial cells, but expression can be induced or upregulated on many cell types including B and T lymphocytes.

Single-Color Reagents

Monoclonal Mouse Anti-Human CD56 Clone: C5.9 • Isotype: IgG2b, kappa			
CE	R725101-2	RPE. Purified	100 tests, 1 mL

Anti-CD56, clone C5.9, has a superior performance compared with Anti-CD56, clone MOC-1. The antibody labels natural killer cells and a subset of CD4+ and CD8+ cells in peripheral blood. CD56 is expressed in a number of malignancies, including some myeloid leukemias, myelomas, neuroblastomas and small cell lung cancers. In flow cytometry R725101-2 labels CD56+ cells with a higher fluorescence intensity than R712701-2 and provides a better separation between positive and negative cells.

Monoclonal Mouse Anti-Human CD56 Clone: MOC-1 • Isotype: IgG1, kappa			
CE	R712701-2	RPE. Purified	100 tests, 1 mL

Reacts with natural killer cells and a subset of CD4+ and CD8+ T cells in peripheral blood. CD56 is present in a number of tumors, including some myeloid leukemias, myelomas, neuroblastomas and small cell lung cancer (SCLC).

Monoclonal Mouse Anti-Human CD57 Clone: TB01 • Isotype: IgM, kappa			
CE	F727001-2	FITC. Purified	100 tests, 1 mL

CD57 is expressed by subsets of NK cells and CD8-positive lymphocytes, and by a small percentage of CD4-positive/CD45RO-positive T lymphocytes in lymph node germinal centres. The number of CD57-positive cells increases in some pathologies characterized by an imbalance of CD4/CD8 lymphocytes. Neuroectodermal cells and striated muscle also express CD57 (1, 2).

References:

1. Leong AS-Y, Cooper K, Leong FJW-M. CD 57. Manual of diagnostic antibodies for immunohistology. London: Oxford University Press; 1999. p. 103-6.
2. Funaro A, Malavasi F. NK5. CD57 Workshop panel report. In: Kishimoto T, Kikutani H, von dem Borne AEG, Goyert SM, Mason DY, Miyasaka M, et al., editors. Leucocyte typing VI. White cell differentiation antigens. Proceedings of the 6th International Workshop and Conference; 1996 Nov 10-14; Kobe, Japan. New York, London: Garland Publishing Inc.; 1997. p. 274-6.

Monoclonal Mouse Anti-Human CD61, Platelet Glycoprotein IIIa Clone: Y2/51 • Isotype: IgG1, kappa			
CE	C728001-2	APC. Purified	100 tests, 1 mL
CE	F080301-2	FITC. Purified	100 tests, 1 mL

Detects platelets in peripheral blood and bone marrow and reacts also with megakaryocytes and megakaryoblasts. The antibody is of value in the diagnosis of megakaryoblastic leukemia.

Monoclonal Mouse Anti-Human CD64, Fc Gamma Receptor I Clone: 10.1 • Isotype: IgG1, kappa			
CE	C727801-2	APC. Purified	100 tests, 1 mL
CE	R721901-2	RPE. Purified	100 tests, 1 mL

Reacts with an antigen (FcγRI) constitutively expressed on monocytes, macrophages and blood dendritic cells. The antigen expression can be induced on neutrophils and eosinophils by interferon γ and granulocyte colony-stimulating factor (G-CSF).

Monoclonal Mouse Anti-Human CD66abce Clone: Kat4c • Isotype: IgG1, kappa			
CE	F711201-2	FITC. Purified	100 tests, 1 mL

CD66 refers to a family of heavily glycosylated glycoproteins whose members are designated CD66a to CD66f. CD66 antibodies often react with two or more members of this family, and antibody Kat4c recognizes three myeloid-associated molecules (CD66a, b, c) and also CD66e (CEA). In consequence, the antibody reacts with myeloid cells at differing stages of maturity (from promyelocytes to granulocytes), and also with a variety of epithelial cells. The antibody is of value in the immunophenotyping of leukemias of myeloid origin.

Monoclonal Mouse Anti-Human CD68 Clone: KP1 • Isotype: IgG1, kappa			
CE	F713501-2	FITC. Purified	100 tests, 1 mL

Reacts with an intracellular lysosomal membrane protein expressed by human monocytes, macrophages and myeloid cells. The antibody is of value for the immunophenotyping of neoplasms of myeloid origin.

Monoclonal Mouse Anti-Human CD71, Transferrin Receptor Clone: Ber-T9 • Isotype: IgG1, kappa			
CE	F082901-2	FITC. Purified	100 tests, 1 mL

Reacts with many proliferating cells in both normal and neoplastic tissue.

Single-Color Reagents

Monoclonal Mouse Anti-Human CD79α Clone: HM57 • Isotype: IgG1, kappa			
CE	C725201-2	APC. Purified	100 tests, 1 mL
CE	R715901-2	RPE. Purified	100 tests, 1 mL

Synthetic human CD79 α peptide has been used as immunogen. Anti-CD79 α , HM57, labels normal and neoplastic B cells. It reacts with an intracytoplasmic epitope. The antibody is useful for the demonstration of B cells in many mammalian species (1).

Reference:

1. Jones M, Cordell JL, Beyers AD, Tse AG, Mason DY. Detection of T and B cells in many animal species using cross-reactive antipeptide antibodies. J Immunol 1993;150:5429-35.

Monoclonal Mouse Anti-Human CD79β Clone: SN8 • Isotype: IgG1, kappa			
CE	F713701-2	FITC. Purified	100 tests, 1 mL
CE	R727201-2	RPE. Purified	100 tests, 1 mL

Reacts with an epitope on the extracellular portion of the b-chain of the CD79 antigen. The antibody is specific for B cells, and is of value for the study of leukemias and lymphomas.

Monoclonal Mouse Anti-Human CD103, Mucosa Lymphocyte Antigen (MLA) Clone: Ber-ACT8 • Isotype: IgG1, kappa			
CE	F713801-2	FITC. Purified	100 tests, 1 mL
CE	R718801-2	RPE. Purified	100 tests, 1 mL

CD103 is the α E integrin subunit of the heterodimeric α E β 7 integrin belonging to a small β 7 integrin subfamily. CD103 is expressed on more than 95% of intraepithelial CD8+ cells and on 40% of mucosa-associated T cells, whereas less than 2% of resting blood lymphocytes are CD103-positive. In several malignant conditions, such as T-cell lymphomas and hairy cell leukemia, the cells express CD103. The antibody is well-suited for the immunophenotyping of leukemias and lymphomas.

Reference:

1. Kruschwitz M, Fritzsche G, Schwarting R, Micklem K, Mason DY, Falini B, et al. Ber-ACT8: monoclonal antibody to the mucosa lymphocyte antigen. J Clin Pathol 1991;44:636-45.

Monoclonal Mouse Anti-Human CD117, c-kit Clone: 104D2 • Isotype: IgG1, kappa			
CE	C724401-2	APC. Purified	100 tests, 1 mL
CE	R714501-2	RPE. Purified	100 tests, 1 mL

CD117, a membrane tyrosine kinase receptor, is encoded by the KIT proto-oncogene, also called c-kit. CD117 is expressed on 1-4% of normal bone marrow cells. The majority of positive cells (50-70%) co-expresses CD34 and comprises progenitor cells and their precursors of all hematopoietic cell lineages. The antibody is of value in the study of acute myeloid leukemia.

Monoclonal Mouse Anti-Human CD138 Clone: MI15 • Isotype: IgG1, kappa			
CE	C725601-2	APC. Purified	100 tests, 1 mL
CE	R722901-2	RPE. Purified	100 tests, 1 mL

CD138, syndecan-1, is a transmembrane proteoglycan with a main cellular expression in stratified and simple epithelia. Within the hemopoietic system, CD138 is mainly confined to late stages of B-cell differentiation (1). CD138 expression is reduced during malignant transformation of various epithelia, and CD138 is rapidly shed by myeloma cells entering into apoptosis, making CD138 a marker of viable myeloma cells (2).

References:

1. Jourdan M, Ferlin M, Legouffe E, Horvathova M, Liautard J, Rossi JF, et al. The myeloma cell antigen syndecan-1 is lost by apoptotic myeloma cells. Br J Haematol 1988;100:637-46.
2. Costes V, Magen V, Legouffe E, Durand L, Baldet P, Rossi J-F, et al. The MI15 monoclonal antidody (anti-syndecan-1) is a reliable marker for quantifying plasma cells in paraffin-embedded bone marrow biopsies. Hum Pathol 1999;30:1405-11.

Monoclonal Mouse Anti-Human CD235a, Glycophorin A Clone: JC159 • Isotype: IgG1, kappa			
CE	F087001-2	FITC. Purified	100 tests, 1 mL
CE	R707801-2	RPE. Purified	100 tests, 1 mL

Reacts with normal erythroid cells at essentially all stages of differentiation from erythroblasts to mature erythrocytes. The antibody reacts with the majority of cases of erythroleukemia.

Single-Color Reagents

c-kit

See: CD117, c-kit

Monoclonal Mouse Anti-Human Epithelial Antigen Clone: Ber-EP4 • Isotype: IgG1, kappa			
CE	F086001-2	FITC. Purified	100 tests, 1 mL

This antibody shows a very broad reactivity with the majority of human epithelial tissues. It does rarely label mesothelial cells. The antibody labels an epitope present on the cell surface and in the cytoplasm. In flow cytometry the antibody is useful for the detection and classification of normal and neoplastic cells of epithelial origin in serous effusions, or in single cell suspensions prepared from tissues.

Fc Gamma Receptor I and III

See: CD64 and CD16, respectively

FMC7

See: B Cell

Glycophorin A

See: CD235a, Glycophorin A

Monoclonal Mouse Anti-Human HLA-ABC Antigen Clone: W6/32 • Isotype: IgG2a, kappa			
CE	R700001-2	RPE. Purified	100 tests, 1 mL

Is directed against a monomorphic epitope on the 45 kDa polypeptide products of the HLA-A, B and C loci. These antigens belong to class I of the mammalian major histocompatibility complex (MHC), in humans known as human leucocyte-associated antigens (HLA). The antibody labels all nucleated cells in peripheral blood or tonsil cell preparations, including polymorphs, monocytes, lymphocytes and eosinophils. Erythrocytes are not labeled. The antibody is relevant for the study of HLA class I expression in cells from solid tumors. The reagent is not intended for use in tissue typing.

Monoclonal Mouse Anti-Human HLA-DP, DQ, DR Antigen Clone: CR3/43 • Isotype: IgG1, kappa			
CE	F081701-2	FITC. Purified	100 tests, 1 mL

Labels principally B cells, most monocytes and activated T cells, but is unreactive with normal T cells and polymorphs. The antibody is useful for the characterization of leukemias and lymphomas, and for the study of activated T cells. The reagent is not intended for use in tissue typing.

Monoclonal Mouse Anti-Human HLA-DR Antigen Clone: AB3 • Isotype: IgG2a, kappa			
CE	F726601-2	FITC. Purified	100 tests, 1 mL
CE	R726701-2	RPE. Purified	100 tests, 1 mL

HLA-DR antigen is constitutively expressed on antigen-presenting cells, such as B lymphocytes, monocytes and dendritic cells, but it can also be detected on activated T lymphocytes and activated granulocytes. Antibodies to HLA-DR antigen are together with a panel of other antibodies considered essential for the initial evaluation of acute leukemia, chronic T and B-cell leukemia, and myeloid leukemia. The reagent is not intended for use in tissue typing.

ICAM-1

See: CD54, ICAM-1

Polyclonal Rabbit Anti-Human IgA, Specific for Alpha-Chains			
CE	F018801-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL

The antigen used for immunization is serum IgA. F018801-2 is intended for use in flow cytometry for the detection of surface IgA on normal and neoplastic B cells.

Polyclonal Rabbit Anti-Human IgD, Specific for Delta-Chains			
CE	F018901-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL
CE	R511201-2	RPE. Affinity-isolated F(ab') ₂	100 tests, 1 mL

The antigen used for immunization is serum IgD. F018901-2 and R511201-2 are intended for use in flow cytometry for the detection of surface IgD on normal and neoplastic B cells.

Polyclonal Rabbit Anti-Human IgG, Specific for Gamma-Chains			
CE	F018501-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL

The antigen used for immunization is serum IgG. F018501-2 is intended for use in flow cytometry for the detection of surface IgG on normal and neoplastic B cells.

Polyclonal Rabbit Anti-Human IgM, Specific for Mu-Chains			
CE	F005801-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL
CE	R511101-2	RPE. Affinity-isolated F(ab') ₂	100 tests, 1 mL

The antigen used for immunization is serum IgM. F005801-2 and R511101-2 are intended for use in flow cytometry for the detection of surface IgM on normal and neoplastic B cells.

Interleukin-2 Receptor

See: CD25, Interleukin-2 Receptor

Single-Color Reagents

Polyclonal Rabbit Anti-Human Kappa Light Chains			
CE	C022201-2	APC. Affinity-isolated F(ab') ₂	100 tests, 1 mL
CE	F043401-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL
CE	R043601-2	RPE. Affinity-isolated F(ab') ₂	100 tests, 1 mL

These reagents have been produced in a manner that ensures a particularly wide specificity for kappa-chains. Most B cells, with the exception of pre-B progenitors, pre-B cells and mature plasma cells, express immunoglobulin on their surface. Each cell expresses only one light chain type. In normal peripheral blood and lymph nodes there is a mixture of kappa+ and lambda+ cells with two-thirds of the cells expressing kappa and one-third expressing lambda (1). The reagents are of value for the demonstration of the monoclonal nature (light chain restriction) of lymphoid neoplasms.

Reference:

1. Johnson A, Olofsson T. Flow cytometric clonal excess analysis of peripheral blood, routine handling, and pitfalls in interpretation. Cytometry 1993;14:188-95.

Ki-1 Antigen			
See: CD30			

Monoclonal Mouse Anti-Human Ki-67 Antigen Clone: MIB-1 • Isotype: IgG1, kappa			
RUO	F726801-8	FITC. Purified	100 tests, 1 mL

The MIB-1 antibody has now been established as the reference monoclonal mouse antibody for the demonstration of the Ki-67 antigen, a nuclear antigen expressed by all human proliferating cells. The antibody recognizes proliferating cells at all stages of the cell cycle (late G₁, S, M and G₂ phases), but not cells in G₀ phase.

References:

1. Scholzen T, Gerdes J. The Ki-67 protein: from the known and the unknown. J Cell Physiol 2000;182:311-22.
2. Endl E, Hollmann C, Gerdes J. Antibodies against the Ki-67 protein: assessment of the growth fraction and tools for cell cycle analysis. In: Darzynkiewicz Z, Crissmann HA, Robinson JP, editors. Methods in cell biology: Cytometry. 3rd ed. San Diego: Academic Press; 2001. Part A. Volume 63. p. 399-418.

Polyclonal Rabbit Anti-Human Lambda Light Chains			
CE	F043501-2	FITC. Affinity-isolated F(ab') ₂	100 tests, 1 mL
CE	PR71250-2	PerCP-Cy5.5 Purified	100 tests, 0.5 mL
CE	R043701-2	RPE. Affinity-isolated F(ab') ₂	100 tests, 1 mL

The antigen used for immunization is a pool of human lambda Bence Jones proteins. These products are intended for use in flow cytometry for the detection of lambda light chains of surface immunoglobulin on normal and neoplastic B cells. The antibody is of value for the demonstration of the monoclonal nature (light chain restriction) of lymphoid neoplasms.

Leucocyte Common Antigen			
See: CD45			

Polyclonal Rabbit Anti-Human Lysozyme EC 3.2.1.17			
CE	F037201-2	FITC. Ig fraction	100 tests, 1 mL

Reacts with the primary and secondary granules of myeloid cells. In flow cytometric immunophenotyping of leukemias, lysozyme is a useful marker for the subclassification of acute myeloid leukemia.

Mucosa-Lymphocyte Antigen (MLA)			
See: CD103, Mucosa-Lymphocyte Antigen (MLA)			

Monoclonal Mouse Anti-Human Myeloperoxidase Clone: MPO-7 • Isotype: IgG1, kappa			
CE	C724601-2	APC. Purified	100 tests, 1 mL
CE	F071401-2	FITC. Purified	100 tests, 1 mL
CE	PR70450-2	PerCP-Cy5.5. Purified	100 tests, 0.5 mL
CE	R720901-2	RPE. Purified	100 tests, 1 mL

Anti-Myeloperoxidase, MPO-7, reacts with granula in the cytoplasm of neutrophil granulocytes and with monocytes. It is valuable for phenotyping acute leukemias since it detects myeloperoxidase in the great majority of cases of acute myeloid leukemia.

Monoclonal Mouse Anti-Human Plasma Cell Clone: VS38c • Isotype: IgG1, kappa			
CE	F714901-2	FITC. Purified	100 tests, 1 mL
CE	PR71350-2	PerCP-Cy5.5 Purified	100 tests, 0.5 mL

Recognizes an intracellular protein of 63 kDa identical with the rough endoplasmic reticulum-associated protein p63. The antibody labels plasma cells strongly, but frequently also labels melanocytic cells, particularly melanoma cells, and a number of epithelial cells, e.g. in mucous glands and tonsils, and secretory epithelia in breast, thyroid and pancreas, both benign and malignant.

Platelet Glycoprotein Ib, IIb and IIIb			
See: CD42b, CD41 and CD61, respectively			

Protein 150,95			
See: CD11c, Protein 150,95			

Monoclonal Mouse Anti-Human Terminal Deoxynucleotidyl Transferase Clone: HT-6 • Isotype: IgG1, kappa			
CE	F713950-2	FITC. Purified	50 tests, 0.5 mL

Reacts with the nuclei of normal T and B-lymphocyte precursors and their neoplastic equivalents (e.g. T cell and pre-B cell acute lymphoblastic leukemias and lymphomas).

Dual-Color Reagents

Our MultiMix Dual-Color Reagents are based on the combination of two or more antibodies labeled with fluorescein isothiocyanate (FITC) and R-phycoerythrin (RPE), respectively.

Monoclonal Mouse Anti-Human CD2/FITC + CD19/RPE Clone: MT910 and HD37 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR89450-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR89450-2 allows simultaneous detection and enumeration of CD2+ cells and B cells.

Monoclonal Mouse Anti-Human CD3/FITC + CD4/RPE Clone: UCHT1 and MT310 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR87550-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR87550-2 allows simultaneous detection and enumeration of T cells and the helper/inducer T-cell subset.

Monoclonal Mouse Anti-Human CD3/FITC + CD8/RPE Clone: UCHT1 and DK25 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR88150-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR88150-2 allows simultaneous detection and enumeration of T cells and the suppressor/cytotoxic T-cell subset.

Monoclonal Mouse Anti-Human CD3/FITC + CD19/RPE Clone: UCHT1 and HD37 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR86650-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR86650-2 allows simultaneous detection and enumeration of T cells and B cells.

Monoclonal Mouse Anti-Human CD4/FITC + CD8/RPE Clone: MT310 and DK25 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR86850-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR86850-2 allows simultaneous detection and enumeration of helper/inducer T cell and suppressor/cytotoxic T-cell subsets.

Monoclonal Mouse Anti-Human CD5/FITC + CD19/RPE Clone: DK23 and HD37 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR88250-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR88250-2 allows simultaneous detection and enumeration of CD5+ cells and B ls.

Monoclonal Mouse Anti-Human CD5/FITC + CD20/RPE Clone: DK23 and B-Ly1 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR72950-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR72950-2 allows simultaneous detection and enumeration of CD5+ T cells and CD20+ B cells.

This combination is particularly effective as both fluorochromes can be excited at 488 nm. The fluorescence emission for FITC is in the green region around 530 nm while the RPE emission is in the orange region above 570 nm.

Monoclonal Mouse Anti-Human CD10/FITC + CD19/RPE Clone: SS2/36 and HD37 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR88350-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR88350-2 allows simultaneous detection and enumeration of CD10+ cells and B cells.

Monoclonal Mouse Anti-Human CD45/FITC + CD14/RPE Clone: T29/33 and TÜK4 • Isotype: IgG1, kappa and IgG2a, kappa			
CE	FR70050-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR70050-2 allows simultaneous subdivision of leucocytes into lymphocytes, monocytes and granulocytes.

Monoclonal Mouse Anti-Human HLA-DP, DQ, DR Antigen/FITC + CD3/RPE Clone: CR3/43 and UCHT1 • Isotype: IgG1, kappa and IgG1, kappa			
CE	FR86750-2	FITC and RPE. Purified	50 tests, 0.5 mL

FR86750-2 allows simultaneous detection and enumeration of MHC class II antigen-positive cells and T cells. The reagent is not intended for use in tissue typing.

Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC + Monoclonal Mouse Anti-Human CD19/RPE Clone: HD37 • Isotype: IgG1, kappa			
CE	FR04850-2	FITC. Affinity-isolated F(ab') ₂ ; RPE. Purified	50 tests, 0.5 mL

FR04850-2 allows the detection and enumeration of kappa light chains on B cells.

Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC + Lambda Light Chains/RPE			
CE	FR48150-2	FITC and RPE. Affinity-isolated F(ab') ₂	50 tests, 0.5 mL

FR48150-2 allows simultaneous detection and enumeration of kappa and lambda light chain bearing cells.

Polyclonal Rabbit Anti-Human Lambda Light Chains/FITC + Monoclonal Mouse Anti-Human CD19/RPE Clone: HD37 • Isotype: IgG1, kappa			
CE	FR04450-2	FITC. Affinity-isolated F(ab') ₂ ; RPE. Purified	50 tests, 0.5 mL

FR04450-2 allows the detection and enumeration of lambda light chains on B cells.

Triple-Color Reagents

Our MultiMix Triple-Color Reagents are based on the combination of three antibodies labeled with fluorescein isothiocyanate (FITC), R-phycoerythrin (RPE) and allophycocyanin (APC) or FITC, RPE and RPE-Cy5. The Triple-Color Reagents are designed for flow cytometers

FITC/RPE/APC Reagent Line

The FITC/RPE/APC Reagent Line is based on the combination of three antibodies labeled with fluorescein

equipped with a 488 nm (blue laser) light source for excitation of FITC, RPE and RPE-Cy5, and a 633/635 nm (red) light source for excitation of APC. CD45/PerCP, Code PR70101-2 is available as drop-in reagent for FITC/RPE/APC MultiMix products.

Monoclonal Mouse Anti-Human B Cell (FMC7)/FITC + CD23/RPE + CD19/APC Clone: FMC7, MHM6 and HD37 Isotype: IgM, kappa, IgG1, kappa and IgG1, kappa			
CE	TC68301-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC68301-2 allows simultaneous detection and enumeration of FMC7-positive, CD23-positive and CD19-positive cells. The FMC7 antigen is expressed by B cells in normal peripheral blood. The antigen is also expressed by malignant cells in chronic lymphoproliferative disorders, including B-cell prolymphocytic leukemia, hairy cell leukemia, mantle cell lymphoma, follicle centre lymphoma, marginal zone lymphoma, mucosa-associated lymphoid tissue lymphoma, diffuse large cell lymphoma, Burkitt's lymphoma and Waldenström macroglobulinemia. CD23 is identical to the low affinity IgE receptor (FcεRII) found on B cells. CD23 is primarily expressed by B cells and monocytes and is also strongly expressed by EBV-transformed B lymphoblasts. In addition, CD23 is present on a large variety of other cells, such as T cells, eosinophils, platelets, Langerhans' cells and a subset of thymic epithelial cells. CD19 is a pan-B-cell antigen that is expressed by B lymphocytes at all stages of maturation excepting differentiated plasma cells. Antibodies to CD19 are considered essential for the initial evaluation of acute and chronic lymphoproliferative disorders.

Monoclonal Mouse Anti-Human CD2/FITC + CD7/RPE + CD3/APC Clone: MT910, CBC.37 and UCHT1 Isotype: IgG1, kappa, IgG2b, kappa and IgG1, kappa			
CE	TC67701-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC67701-2 allows simultaneous detection and enumeration of T cell subpopulations. CD2 is a useful marker in the assessment of lymphoid malignancies as it is expressed in the majority of precursor and postthymic lymphomas and leukemias. In some neoplastic T-cell populations, e.g. in peripheral T-cell lymphomas, CD2 may be aberrantly deleted. CD7 is expressed on mature T cells and anti-CD7 is considered essential for the initial evaluation of T-cell acute lymphoblastic leukemias (T-ALL) and T-cell chronic leukemias together with a panel of other antibodies. CD3 is a pan-T-cell restricted antigen and is a valuable marker for normal and neoplastic T cells.

Monoclonal Mouse Anti-Human CD2/FITC + CD34/RPE + CD5/APC Clone: MT910, BIRMA-K3 and DK23 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66601-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66601-2 allows simultaneous detection and enumeration of CD2+ T cells, CD34+ cells and CD5+ B cells. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD3/FITC + CD19/RPE + CD45/APC Clone: UCHT1, HD37 and 2D1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC69001-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC69001-2 allows simultaneous detection and enumeration of CD3-positive T cells and CD19-positive B cells in combination with CD45-positive leucocytes. CD3 is a pan-T-cell restricted antigen, which is a valuable marker for normal and neoplastic T cells. CD19 is the broadest lineage-specific surface marker for B cells and it is present on the surface of virtually all B lymphocytes, including early B progenitor cells. CD19 expression is maintained in B-lineage cells that have undergone neoplastic transformation. Antibodies to CD19 are considered essential for the initial evaluation of acute and chronic lymphoproliferative disorders. CD45 is one of the most abundant leucocyte cell surface glycoproteins and is expressed exclusively on cells of the hematopoietic system and their progenitors. Anti-CD45, together with a panel of other antibodies, is considered essential for the initial evaluation of chronic lymphoproliferative disorders and acute leukemias. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD5/FITC + CD10/RPE + CD19/APC Clone: DK23, SS2/36 and HD37 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66401-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66401-2 allows simultaneous detection and enumeration of CD5+ T cells, CD10+ cells and CD19+ B cells. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD8/FITC + CD4/RPE + CD3/APC Clone: DK25, MT310 and UCHT1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66001-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66001-2 is intended for identification of the relative percentages of CD4 and CD8-positive T cells. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD13/FITC + HLA-DR Antigen/RPE + CD117/APC Clone: WM-47, AB3 and 104D2 Isotype: IgG1, kappa, IgG2a, kappa and IgG1, kappa			
CE	TC68501-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC68501-2 allows simultaneous detection and enumeration of cells expressing CD13, HLA-DR antigen and CD117. CD13 is expressed on the surface of committed granulocyte-monocyte progenitors (CFU-GM) and by cells of the granulocyte and monocyte lineages at all stages of differentiation, as well as by neoplastic counterparts of these cells. The HLA-DR antigen is constitutively expressed on antigen-presenting cells, such as B lymphocytes, monocytes and dendritic cells, but it can also be detected on activated T lymphocytes and activated granulocytes. The antigen has been found expressed in cases of different types of acute lymphoblastic leukemias, acute myeloid leukemias (AML) except AML-M3, chronic T-cell leukemias, chronic myeloid leukemias (CML) and B and T-cell non-Hodgkin's leukemias. CD117 is a marker for tissue mast cells, hematopoietic stem cells, and progenitor cells in normal human bone marrow. The majority of CD117+ marrow cells co-express CD34 and comprise progenitor cells and their precursors of all hematopoietic lineages. Antibodies to CD117, together with a panel of other antibodies, are useful for identification of AML, and for classification of leukemias. TC68501-2 is not intended for tissue typing.

Monoclonal Mouse Anti-Human CD16/FITC + CD56/RPE + CD3/APC Clone: DJ130c, C5.9 and UCHT1 Isotype: IgG1, kappa, IgG2b, kappa and IgG1, kappa			
CE	TC66101-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66101-2 allows simultaneous detection and enumeration of NK cells and T cells.

Monoclonal Mouse Anti-Human CD19/FITC + CD34/RPE + CD22/APC Clone: HD37, BIRMA-K3 and 4KB128 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC68901-2	FITC, RPE and APC. Purified	50 tests, 1 mL

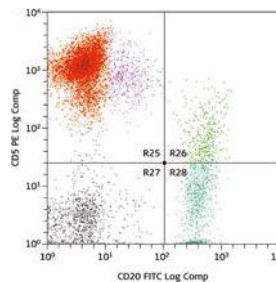
TC68901-2 allows simultaneous detection and enumeration of cells expressing CD19, CD34 and CD22. CD19 is the broadest lineage-specific surface marker for B cells and it is present on the surface of virtually all B lymphocytes, including early B progenitor cells. CD19 expression is maintained in B-lineage cells that have undergone neoplastic transformation. Antibodies to CD19 are considered essential for the initial evaluation of acute and chronic lymphoproliferative disorders. CD34 is present on hematopoietic progenitor cells in bone marrow and blood, whereas CD34 is normally not detected on peripheral blood leucocytes and platelets. Approximately 60% of acute B-lymphoid leukemias, 40% of acute myeloid leukemias (AML), and 1-5% of acute T-lymphoid leukemias express CD34. Chronic lymphoid leukemias, lymphomas and multiple myelomas have been found to be uniformly CD34 negative. CD22 is expressed on normal and neoplastic B lymphocytes in bone marrow and blood. CD22 is present in neoplasms of B-cell origin, including primitive lymphomas that lack monoclonal surface immunoglobulins, and most cases of common acute lymphoblastic leukemia. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD19/FITC + Polyclonal Rabbit Anti-Human Lambda Light Chains/RPE + Kappa Light Chains/APC Clone: HD37 • Isotype: IgG1, kappa			
CE	TC66901-2	FITC. Purified; RPE and APC. Affinity-isolated F(ab') ₂	50 tests, 1 mL

TC66901-2 allows simultaneous detection and enumeration of kappa and lambda light chain bearing B cells. Recommended control reagent is Code X097901-2.

Monoclonal Mouse Anti-Human CD20/FITC + CD5/RPE + CD19/APC Clone: B-Ly1, DK23 and HD37 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66301-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66301-2 allows simultaneous detection and enumeration of CD19+ and/or CD20+ B cells and CD5+ T cells. Recommended control reagent is Code X097801-2.



Normal peripheral blood stained with TC66301-2, Monoclonal Mouse Anti-Human CD20/FITC + CD5/RPE + CD19/APC. The sample is gated on lymphocytes on an FSC/SSC dot plot. The orange population is the CD5+ T cells and the magenta population shows the CD5+CD20dim T cells.

Monoclonal Mouse Anti-Human CD33/FITC + CD34/RPE + CD117/APC Clone: WM-54, BIRMA-K3 and 104D2 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC68601-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC68601-2 allows simultaneous detection and enumeration of CD33, CD34 and CD117-positive cells. CD33 is expressed by subsets of myeloid progenitors, monocytes, granulocytic precursors, and at low levels by neutrophils. CD33 has been found on the cell surface of leukemic blasts from the vast majority of cases of acute myeloid leukemia (AML). CD34 expression is confined to lymphohematopoietic progenitor cells, with the exception of capillary endothelial cells. CD34 appears to be expressed at the highest levels on the earliest progenitors, and to decrease progressively with maturation. Approximately 60% of acute B-lymphoid leukemias, 40% of AML and 1-5% of acute T-lymphoid leukemias express CD34. CD117 is a marker for hematopoietic stem and progenitor cells, and tissue mast cells. The majority (50-70%) of CD117-positive cells co-express CD34 and comprise progenitor cells and their precursors of all hematopoietic lineages. CD117 is frequently found to be expressed on blasts of patients with AML, but is absent from ALL blasts. Recommended control reagent is Code X097801-2.

Triple-Color Reagents

Monoclonal Mouse Anti-Human CD38/FITC + CD56/RPE + CD19/APC Clone: AT13/5, C5.9 and HD37 Isotype: IgG1, kappa, IgG2b, kappa and IgG1, kappa			
CE	TC67401-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC67401-2 allows simultaneous detection and enumeration of plasma cells, NK cells and B cells. CD38 is a plasma cell marker, and anti-CD38 is useful for the identification of poorly differentiated plasma cells, which may mimic other blastic lymphoid cells. Additionally anti-CD38 is valuable for the immunophenotyping of acute leukemias. CD56 is the prototypic marker of human NK cells, and it is also expressed by a subset of CD4+ and CD8+ T cells in peripheral blood. CD19 is the broadest lineage-specific surface marker for B cells, and its expression is maintained in B-lineage cells that have undergone neoplastic transformation. Anti-CD19 is considered essential for the initial evaluation of acute and chronic lymphoproliferative disorders.

Monoclonal Mouse Anti-Human CD38/FITC + CD56/RPE + CD45/APC Clone: AT13/5, C5.9 and 2D1 Isotype: IgG1, kappa, IgG2b, kappa and IgG1, kappa			
CE	TC67101-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC67101-2 allows simultaneous detection and enumeration of CD38 and CD56-positive cells in combination with CD45-positive leucocytes. CD38 is a useful marker in the immunophenotyping of acute leukemias. Additionally, antibodies to CD38 are valuable for the identification of plasma cells, as poorly differentiated plasma cells may mimic other blastic lymphoid cells. CD56 is the prototypic marker of natural killer (NK) cells and it is also present on a subset of CD4+ and CD8+ T cells in peripheral blood. CD45 is one of the most abundant leucocyte cell surface glycoproteins and is expressed exclusively on cells of the hematopoietic system and their progenitors. Anti-CD45, together with a panel of other antibodies, is considered essential for the initial evaluation of chronic lymphoproliferative disorders and acute leukemias.

Monoclonal Mouse Anti-Human CD41/FITC + CD34/RPE + CD61/APC Clone: 5B12, BIRMA-K3 and Y2/51 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC68701-2	FITC, RPE and APC. Purified	50 tests, 1 mL

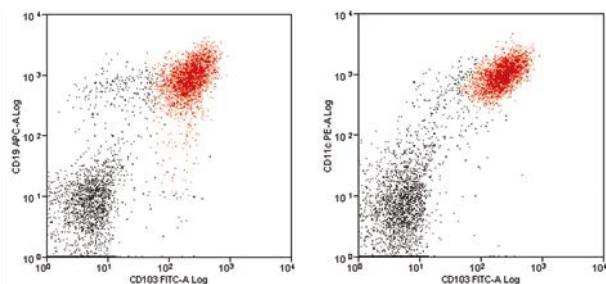
TC68701-2 allows simultaneous detection and enumeration of CD41 and CD61-positive platelets and CD34-positive progenitor cells. CD41 and CD61 are selective markers of platelets and platelet precursors, and they may be of value for immunophenotyping of megakaryoblastic leukemias. The CD41/CD61 complex appears early in megakaryocyte maturation. The activated CD41/CD61 complex is a receptor for von Willebrand factor, soluble fibrinogen and fibronectin and plays a central role in platelet activation and aggregation. CD34 is present on hematopoietic progenitor cells in bone marrow and blood, whereas CD34 is normally not detected on peripheral blood leucocytes and platelets. Approximately 60% of acute B-lymphoid leukemias, 40% of acute myeloid leukemias (AML), and 1-5% of acute T-lymphoid leukemias express CD34. Chronic lymphoid leukemias, lymphomas and multiple myelomas have been found to be uniformly CD34-negative. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD71/FITC + CD235a/RPE + CD45/APC Clone: Ber-T9, JC159 and 2D1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC67501-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC67501-2 allows simultaneous detection and enumeration of cells expressing CD71, CD235a and CD45. In normal tissues, high expression of CD71 (transferrin receptor) is seen in erythroid precursors and hemoglobinsynthesizing reticulocytes but expression is lost in mature erythrocytes. Activated, but not resting, lymphocytes express CD71. Anti-CD71, together with a panel of other antibodies, is considered relevant for the initial evaluation of acute leukemias of the erythroid lineage. CD235a (glycophorin A) is expressed on erythroid cells beginning on morphologically recognizable erythroid precursors, just after the CFU-E stage, to the mature erythrocyte. The majority of cases of erythroleukemia express CD235a on neoplastic erythroblasts, whereas acute myeloid leukemia and acute lymphoblastic leukemia only very rarely express CD235a. CD45 is one of the most abundant leucocyte cell surface glycoproteins and is expressed exclusively on cells of the hematopoietic system and their progenitors. Anti-CD45, together with a panel of other antibodies, is considered essential for the initial evaluation of chronic lymphoproliferative disorders and acute leukemias. Recommended control reagent is Code X097801-2.

Monoclonal Mouse Anti-Human CD103/FITC + CD11c/RPE + CD19/APC Clone: Ber-ACT8, KB90 and HD37 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66501-2	FITC, RPE and APC. Purified	50 tests, 1 mL

CD103, CD11c and CD19. CD103 is expressed on mucosal T cells, on activated CD8+ T cells and on hairy cell leukemia cells. In several malignant conditions, such as T-cell lymphomas and hairy cell leukemias, the cells express CD103. Antibodies to CD103 are valuable for the evaluation of chronic B-cell leukemias and T-cell lymphomas. CD11c is expressed on a variety of cells including granulocytes, monocytes, macrophages, natural killer (NK) cells, dendritic cells and neoplastic cells. Antibodies to CD11c are useful for the initial evaluation of B-cell lymphoproliferative disorders, e.g. hairy cell leukemia and B-cell chronic lymphocytic leukemia. CD19 is the broadest lineage-specific surface marker for B cells and it is present on the surface of virtually all B lymphocytes, including early B progenitor cells. CD19 expression is maintained in B-lineage cells that have undergone neoplastic transformation. Antibodies to CD19 are considered essential for the initial evaluation of acute and chronic lymphoproliferative disorders. Recommended control reagent is Code X097801-2.

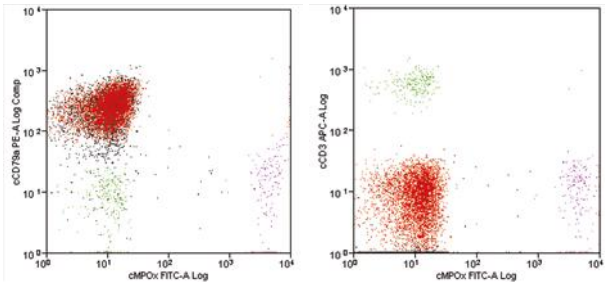


Peripheral blood from a case of hairy cell leukemia stained with TC66501-2. Hairy cell leukemia cells (CD11c+CD19+CD103+) are shown in red. Courtesy of professor Peter Hokland.

Triple-Color Reagents

Monoclonal Mouse Anti-Human MPO/FITC + CD79acy/RPE + CD3/APC Clone: MPO-7, HM57 and UCHT1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66701-2	FITC, RPE and APC. Purified	50 tests, 1 mL

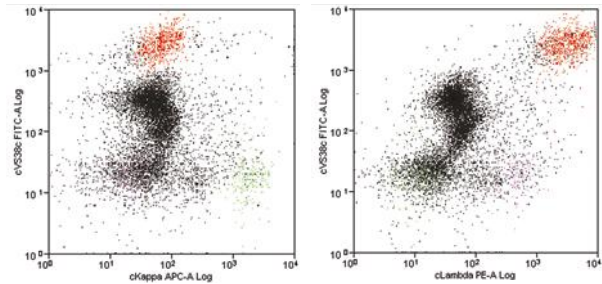
TC66701-2 allows simultaneous detection and enumeration of granulocytes, B cells and T cells. Recommended control reagent is Code X097801-2.



Bone marrow from a case of B-cell acute lymphoblastic leukemia (B-ALL) stained with TC66701-2. B-ALL cells (CD79acy+) are shown in red. Normal myeloid cells (MPO+) are shown in magenta. Normal T cells (CD3+) are shown in green. Courtesy of professor Peter Hokland.

Monoclonal Mouse Anti-Human Plasma Cell/FITC + Polyclonal Rabbit Anti-Human Lambda Light Chains/RPE + Kappa Light Chains/APC Clone: VS38c • Isotype: IgG1, kappa			
CE	TC67001-2	FITC. Purified; RPE and APC. Affinity-isolated F(ab') ₂	50 tests, 1 mL

TC67001-2 allows simultaneous intracellular detection and enumeration of kappa and lambda light chains in plasma cells. Recommended control reagent is Code X097901-2.



Bone marrow from a case of multiple myeloma stained with TC67001-2. The multiple myeloma cells (VS38c+lambda+) are shown in red. Normal B cells (kappa+ or lambda+) are shown in green and magenta, respectively. Courtesy of professor Peter Hokland.

Monoclonal Mouse Anti-Human TdT/FITC + CD22/RPE + CD3/APC Clone: HT-6, 4KB128 and UCHT1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC66801-2	FITC, RPE and APC. Purified	50 tests, 1 mL

TC66801-2 allows simultaneous detection and enumeration of T and B-lymphocyte precursor cells, B cells and T cells. Recommended control reagent is Code X097801-2.

FITC/RPE/RPE-Cy5 Reagent Line

The FITC/RPE/RPE-Cy5 Reagent Line is based on the combination of three antibodies labeled with fluorescein isothiocyanate (FITC), R-phycoerythrin (RPE) and

R-phycoerythrin-Cy5 (RPE-Cy5). The fluorochrome RPE-Cy5 consists of the cyanine dye, Cy5, covalently coupled to RPE.

Monoclonal Mouse Anti-Human CD8/FITC + CD4/RPE + CD3/RPE-Cy5 Clone: DK25, MT310 and UCHT1 Isotype: IgG1, kappa, IgG1, kappa and IgG1, kappa			
CE	TC64150-2	FITC, RPE and RPE-Cy5. Purified	50 tests, 0.5 mL

TC64150-2 allows simultaneous detection and enumeration of T cells, and the suppressor/cytotoxic and helper/inducer T-cell subsets. Recommended control reagent is Code X095650-2.

Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC + Lambda Light Chains/RPE + Monoclonal Mouse Anti-Human CD19/RPE-Cy5 Clone: HD37 • Isotype: IgG1, kappa			
CE	TC05150-2	FITC and RPE. Affinity-isolated F(ab') ₂ ; RPE-Cy5. Purified	50 tests, 0.5 mL

TC05150-2 allows simultaneous detection and enumeration of kappa and lambda bearing B cells. Recommended control reagent is Code X095750-2.

Isotype and Control Reagents

Isotype and fluorochrome-matched control reagents are important tools for assessing the specificity of immunological stainings. Our mouse antibody controls are based on monoclonal mouse antibodies of different isotypes, and unless indicated otherwise, directed towards *Aspergillus niger* glucose oxidase, an enzyme which is

neither present nor inducible in mammalian tissues. The controls are provided as conjugated, purified antibodies. Our rabbit antibody controls have been prepared from the serum of nonimmunized rabbits. The controls have been processed in the same way as our conjugated, solid-phase absorbed F(ab')₂ fragment rabbit antibodies.

Single-Color Mouse Isotype Reagents

Mouse IgG1			
CE	X096801-2	APC. Purified	1 mL
CE	X092701-2	FITC. Purified	1 mL
CE	X092801-2	RPE. Purified	1 mL
CE	X095501-2	RPE-Cy5. Purified	1 mL

Flow cytometry control reagents for single-color monoclonal mouse antibodies of isotype IgG1.

Mouse IgG2a			
CE	X093301-2	FITC. Purified	1 mL
CE	X095001-2	RPE. Purified	1 mL

Flow cytometry control reagents for single-color monoclonal mouse antibodies of isotype IgG2a.

Single-Color Rabbit Ig Reagents

Rabbit F(ab') ₂			
CE	X099801-2	APC. Solid-phase absorbed F(ab') ₂	1 mL
CE	X092901-2	FITC. Solid-phase absorbed F(ab') ₂	1 mL
CE	X093001-2	RPE. Solid-phase absorbed F(ab') ₂	1 mL

Flow cytometry control reagents for single-color solid-phase absorbed APC, FITC and RPE-conjugated rabbit antibodies provided as F(ab')₂ fragments.

Dual-Color Mouse Isotype/Rabbit Ig Reagents

Mouse IgG1/FITC + Mouse IgG1/RPE			
CE	X093250-2	FITC and RPE. Purified	0.5 mL

Flow cytometry control reagent for MultiMix Dual-Color Reagents of the composition: monoclonal mouse antibody isotype IgG1/FITC, and monoclonal mouse antibody isotype IgG1/RPE.

Mouse IgG1/FITC + Mouse IgG2a/RPE			
CE	X094950-2	FITC and RPE. Purified	0.5 mL

Flow cytometry control reagent for MultiMix Dual-Color Reagents of the composition: monoclonal mouse antibody isotype IgG1/FITC, and monoclonal mouse antibody isotype IgG2a/RPE.

Rabbit F(ab') ₂ /FITC + Rabbit F(ab') ₂ /RPE			
CE	X093550-2	FITC and RPE. Solid-phase absorbed F(ab') ₂	0.5 mL

Flow cytometry control reagent for MultiMix Dual-Color Reagents of the composition: solid-phase absorbed rabbit antibody F(ab')₂ fragment/FITC, and solid-phase absorbed rabbit antibody F(ab')₂ fragment/RPE.

Triple-Color Mouse Isotype/Rabbit Ig Reagents, FITC/RPE/APC Reagent Line

Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/APC			
CE	X097801-2	FITC, RPE and APC. Purified	50 tests, 1 mL

Flow cytometry control reagent for MultiMix Triple-Color Reagents of the composition: monoclonal mouse antibody isotype IgG1/FITC, monoclonal mouse antibody isotype IgG1/RPE, and monoclonal mouse antibody isotype IgG1/APC.

Mouse IgG1/FITC + Rabbit F(ab') ₂ /RPE + Rabbit F(ab') ₂ /APC			
CE	X097901-2	FITC, RPE and APC. Purified	1 mL

Flow cytometry control reagent for MultiMix Triple-Color Reagents of the composition: monoclonal mouse antibody isotype IgG1/FITC, solid-phase absorbed rabbit antibody F(ab')₂ fragment/RPE, and solid-phase absorbed rabbit antibody F(ab')₂ fragment/APC.

Triple-Color Mouse Isotype/Rabbit Ig Reagents, FITC/RPE/RPE-Cy5 Reagent Line

Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/RPE-Cy5			
CE	X095650-2	FITC, RPE and RPE-Cy5. Purified	0.5 mL

Flow cytometry control reagent for MultiMix Triple-Color Reagents of the composition: monoclonal mouse antibody isotype IgG1/FITC, monoclonal mouse antibody isotype IgG1/RPE, and monoclonal mouse antibody isotype IgG1/RPE-Cy5.

Rabbit F(ab') ₂ /FITC + Rabbit F(ab') ₂ /RPE + Mouse IgG1/RPE-Cy5			
CE	X095750-2	FITC and RPE. Solid-phase absorbed F(ab') ₂ ; RPE-Cy5. Purified	0.5 mL

Flow cytometry control reagent for MultiMix Triple-Color Reagents of the composition: solid-phase absorbed rabbit antibody F(ab')₂ fragment/FITC, solid-phase absorbed rabbit antibody F(ab')₂ fragment/RPE, and monoclonal mouse antibody isotype IgG1/RPE-Cy5.

Unconjugated Control Reagents

Mouse IgG1			
CE	X093101-2	Culture supernatant	1 mL

X093101-2 is a cell culture supernatant containing monoclonal mouse IgG1 antibody to *Aspergillus niger* glucose oxidase, an enzyme which is neither present nor inducible in mammalian tissues. X093101-2 is well-suited as a negative control in all techniques utilizing monoclonal mouse antibodies of isotype IgG1.

Secondary Antibody Conjugates

The reagents listed in this section have been tailored to provide optimal specific fluorescence and a very low

non-specific background in indirect immunofluorescence techniques.

Polyclonal Goat Anti-Mouse Immunoglobulins			
CE	F047902-2	FITC. Affinity-isolated F(ab') ₂	2 mL
CE	R048001-2	RPE. Affinity-isolated F(ab') ₂	1 mL

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption.

Polyclonal Rabbit Anti-Mouse Immunoglobulins			
CE	F031302-2	FITC. F(ab') ₂	2 mL
CE	R043901-2	RPE. Affinity-isolated F(ab') ₂	1 mL

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption.

Ancillary for Flow Cytometry

Phosphate-Buffered Saline (PBS), pH 7.0			
CE	S302430-2		6 x 1 L

The buffer is supplied as 6 packages. Each makes 1 L of 0.02 mol/L sodium phosphate buffer, 0.15 mol/L NaCl, pH 7.0.

Kits and Accessories

This section includes a diverse range of kits and reagents used in flow cytometry such as our intracellular staining solution IntraStain and research solutions for quantitative

Calibration Beads

FluoroSpheres 6-Peak, Sensitivity Particles			
CE	K011011-2	Calibration beads for daily monitoring of the flow cytometer	40 tests

FluoroSpheres 6-Peak are polystyrene microparticles suited for daily monitoring of the flow cytometer. FluoroSpheres contain a mixture of 3.2 µm microparticles of six different fluorescence intensities. Each particle contains a mixture of fluorochromes to be excited at any wavelength from 364 to 650 nm. This broad excitation range allows the kit to be used in instruments with UV, and single or dual laser light sources.

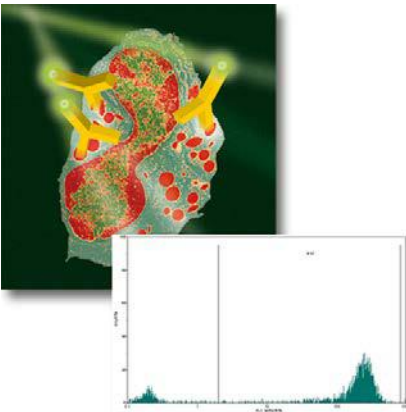
Lysing, Fixation and Permeabilization Reagents

Erythrocyte-Lysing Reagent without Fixative, EasyLyse			
CE	S236430-2	Concentrated x 20	300 tests, 6 x 5 mL

This reagent provides complete and gentle lysis of erythrocytes. It is used following immunofluorescence staining of cells from whole blood, leukapheresis samples or cord blood, and prior to flow cytometric analysis. The reagent contains ammonium chloride and no fixative. One package contains 6 vials of 5 mL 20 x concentrated solution. Owing to the optical matching properties of EasyLyse, the residual red cell debris does not need to be removed by centrifugation for most samples, making the reagent suitable for use in both 'wash' and 'no wash' staining procedures. The reagent is designed for use with most commercially available flow cytometers.

IntraStain			
CE	K231111-2		100 tests

Fixation and permeabilization kit for flow cytometry. IntraStain is intended for two-step fixation and permeabilization of single-cell suspensions. This procedure allows immunological detection of intracellular antigens while the cellular structure, morphologic light scatter, and cell surface immunoreactivity remain intact. Cells treated with IntraStain can, therefore, be identified in flow cytometry by their light scatter properties and surface marker expression, while simultaneously being analysed for intracellular antigens.



Intracellular staining of cells from a case of acute myeloid leukemia using IntraStain, Code K231111-2, and Anti-Myeloperoxidase/ FITC, CodeF071401-2.

determination of cell-surface antigens (QIFIKIT®) and measurement of telomeric sequences in vertebrate interphase hematopoietic cells (Telomere PNA Kit/FITC).

Quantitative Analysis

QIFIKIT®*			
RUO	K007811-8		10 calibrations

QIFIKIT® is intended for the quantitative determination of cell surface antigens by flow cytometry using indirect immunofluorescence assay (1, 2). QIFIKIT® consists of a series of 6-bead populations, approximately 10 µm in diameter and coated with different, but well-defined quantities of a mouse monoclonal antibody (Mab). The number of Mab molecules on the 6-bead populations ranges from 0 to 400 000-800 000. The precise values are provided with the kit. The beads mimic cells labeled with a specific primary mouse monoclonal antibody. Briefly, the procedure for quantitation is as follows: Specimen cells are labeled with primary mouse Mab at saturating concentration. Under this condition the primary Mab binds to the cell surface antigen monovalently. Therefore, the number of bound antibody molecules corresponds to the number of antigenic sites. Then, the cells are incubated, in parallel with the QIFIKIT® beads, with Polyclonal Goat Anti-Mouse Immunoglobulins/FITC, Goat F(ab)₂, at saturating concentration. A calibration curve is constructed by plotting the fluorescence intensity of the individual bead populations against the number of Mab molecules on the beads. The number of antigenic sites on the specimen cells are then determined by interpolation. The kit is presented as two complementary bead cocktails: A 'Set-Up Cocktail' and a 'Calibration Cocktail', each containing 1 mL, enough for 10 calibrations. Also included in the kit is 200 µL Polyclonal Goat Anti-Mouse Immunoglobulins/ FITC, Goat F(ab)₂. The kit is economical in use, as different cell specimens may be labeled with different primary antibodies and then quantitated using the same set of calibration beads. The only requirement is that specimens and beads are incubated with the conjugate simultaneously.

* Registered trademark of BIOCYTEX

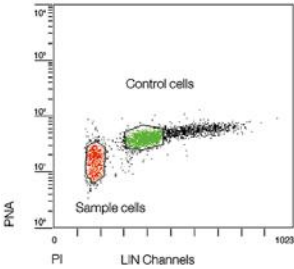
References:

1. Poncelet P, Carayon P. Cytofluorometric quantification of cell-surface antigens by indirect immunofluorescence using monoclonal antibodies. J Immunol Methods 1985;85:65-74.
2. Poncelet P, Lavabre-Bertrand T, Carayon P. Quantitative phenotypes of B chronic lymphocytic leukemia B cells established with monoclonal antibodies from the B cell protocol. In: Reinherz EL et al., eds. Leukocyte Typing II. New York-Berlin-Heidelberg-Tokyo: Springer-Verlag, 1986;2:329-43.

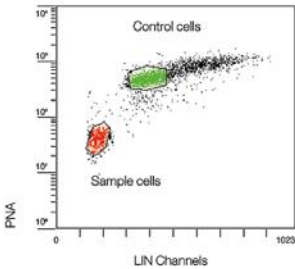
Telomere PNA Kit

Telomere PNA Kit/FITC, for Flow Cytometry		
RUO	K532711-8	20 duplicate tests

Telomere PNA Kit/FITC for Flow Cytometry provides a convenient method for measuring telomeric sequences in vertebrate interphase hematopoietic cells. The kit contains reagents for 20 duplicate tests (40 single tests). In addition to the fluorescein-conjugated peptide nucleic acid (PNA) probe in hybridization solution, the kit contains hybridization solution without probe for correction of cell autofluorescence, wash solution for post-hybridization washes and DNA staining solution for identification of G₀/1-cells. The kit has been designed so that post-hybridization washes are kept to a minimum and formamide washes are avoided. In a mixture of sample cells (provided by the user) and control cells (provided by the user), the sample DNA is denatured at 82 °C for 10 minutes in an Eppendorf tube in the presence of hybridization solution with or without fluorescein-conjugated PNA telomere probe. Then, hybridization takes place in the dark at room temperature overnight. The hybridization is followed by 2 washes in wash solution at 40 °C for 10 minutes each. Finally the cells are resuspended in DNA-staining solution and stored in the dark at 2-8 °C for 2-3 hours before analysis by flow cytometry. The specific fluorescence from telomere staining will be observed in FL1, and fluorescence from DNA staining will be observed in FL3. Compared with the traditional telomere restriction fragment (TRF) method, a major advantage of the Telomere PNA Kit/FITC assay is that it does not suffer from the interaction of subtelomere sequences.



Cells mixed with hybridization solution without probe.



Cells hybridized with hybridization solution containing Telomere PNA Probe/FITC.



General Product Information

– Reagents & Kits

Monoclonal Antibodies

We produce a wide range of monoclonal mouse antibodies, which have been carefully selected on the basis of their value, either for research or for the analysis of pathological human cells by immunohistochemistry or flow cytometry.

Tissue Culture Antibodies. With only a few exceptions, our monoclonal antibodies are produced in tissue culture. This gives advantages in the use of the antibodies. For example, background problems are virtually absent with such reagents because all the mouse immunoglobulin molecules are directed against the target antigen.

Specificity. Our monoclonal antibodies are extensively screened on a multitude of tissue sections or other relevant biological material to ascertain that they possess the necessary specificity and give consistent, strong labeling reactions.

Solvent. Our monoclonal antibodies are, generally, supplied in the liquid form. The majority of unconjugated antibodies are supplied as tissue culture supernatants containing 0.05 mol/L Tris/HCl, pH 7.2, and 15 mmol/L sodium azide. The azide can be removed by dialysis or gel filtration if it interferes with the use of the antibody. However, after removal of the azide, the antibody must be stored frozen.

Storage. 2-8 °C.

Further Information. A package insert is supplied with each vial of monoclonal antibody. It states intended/recommended use, clone, isotype, specificity, as well as recommended staining procedure when applicable. Package inserts are also available on www.agilent.com.

The products require no hazard labeling.

Polyclonal Antibodies

Since 1966, we have produced polyclonal antibodies and our portfolio is constantly growing. Extensive knowledge of protein chemistry and immunochemistry, careful selection of animals for immunization, and optimal, long-term immunization schemes form the basis of our high-quality products.

Advantages of Rabbit Polyclonal Antibodies. Human antibodies reacting with rabbit immunoglobulins occur rarely. Therefore, rabbit antibodies can be used without risk of non-specific binding even in very sensitive techniques.

Low Batch-to-Batch Variation. Our batches of polyclonal antibodies consist of the pooled sera from a large number of animals. This method eliminates the presence of a single predominating atypical antibody and therefore leads to a minimal batch-to-batch variation.

Immunoglobulin fractions. Our polyclonal antibodies are offered in the form of immunoglobulin fractions, with a few exceptions.

Specificity. Monospecificity of our polyclonal antibodies is obtained by the use of highly purified antigens for immunization. Traces of unwanted antibodies are removed by liquid or solid-phase absorption.

Affinity-isolated antibodies. Our antibodies are prepared by immuneaffinity chromatography, using antigens coupled to a solid matrix. The elution and adsorption techniques used guarantee antibodies of high affinity.

F(ab')₂. We also provide antibodies lacking the Fc region. These F(ab')₂ fragments are derived from full-length antibody by proteolytic cleavage and carry the antigen binding region. The antigen binding fragment is purified by chromatographic methods to ensure consistent high purity and quality.

Fluorochrome-Conjugated Antibodies for Flow Cytometry

Characterization of Allophycocyanin (APC) Conjugates.

Purified monoclonal antibodies or F(ab')₂ fragments of affinity-isolated antibodies are conjugated with cross-linked allophycocyanin (APC). After conjugation, unreacted APC and unreacted antibodies are completely removed by gel filtration. The molar APC/antibody ratio is approximately 1. APC conjugates can be excited at 633 nm or 635 nm (red lasers), and emit light at 660 nm.

Characterization of Fluorescein (FITC) Conjugates.

Purified monoclonal antibodies or F(ab')₂ fragments of affinity-isolated polyclonal antibodies are conjugated with fluorescein isothiocyanate isomer 1 (FITC). After conjugation, unreacted FITC is completely removed by gel filtration. The molar FITC/antibody ratio is approximately 4. FITC conjugates can be excited at 488 nm (blue laser) and emit light at 530 nm.

Characterization of Pacific Blue (PB) Conjugates. Purified monoclonal antibodies are conjugated with Pacific Blue (PB)*. After conjugation, unreacted PB is completely removed by gel filtration. The molar PB/ab ratio is approximately 6. PB conjugates can be excited at 406 nm (violet laser) and emit light at 456 nm.

Characterization of Peridinin Chlorophyll Protein Complex (PerCP) Conjugates. Purified monoclonal antibodies are conjugated with Peridinin Chlorophyll Protein (PerCP). After conjugation, unreacted PerCP is completely removed by gel filtration. The molar PerCP/antibody ratio is approximately 2. PerCP conjugates can be excited at 488 nm (blue laser) and emit light at 676 nm.

Characterization of Peridinin Chlorophyll Protein

Complex-Cy5.5 (PerCP-Cy5.5) Conjugates. Purified monoclonal antibodies are conjugated with an energy transfer fluorochrome (PerCP-Cy5.5) consisting of a cyanine dye, Cy5.5, covalently coupled to Peridinin Chlorophyll Protein Complex (PerCP). The excitation energy, absorbed at 488 nm by PerCP is transferred to Cy5.5, which emits light at 695 nm. After conjugation, unreacted PerCP-Cy5.5 complex and unreacted antibodies are completely removed by gel filtration. The molar PerCP-Cy5.5/antibody ratio of the conjugate is approximately 1.

Characterization of R-Phycoerythrin (RPE) Conjugates.

Purified monoclonal antibodies or F(ab')₂ fragments of affinity-isolated polyclonal antibodies are conjugated with R-phycoerythrin (RPE). After conjugation, unreacted RPE and unreacted antibodies are completely removed by gel filtration. The molar RPE/antibody ratio is approximately 1. RPE conjugates can be excited at 488 nm (blue argon laser) and emit light at 570 nm.

Characterization of R-Phycoerythrin-Cy5 (RPE-Cy5) Conjugates.

Purified monoclonal antibodies are conjugated with an energy transfer fluorochrome (RPE-Cy5) consisting of a cyanine dye, Cy5, covalently coupled to R-phycoerythrin (RPE). The excitation energy, absorbed at 488 nm by RPE, is transferred to Cy5, which emits light at 670 nm. After conjugation, unreacted RPE-Cy5-complex and unreacted antibodies are completely removed by gel filtration. The molar RPE-Cy5/antibody ratio of the conjugate is approximate¹. Please note that RPE-Cy5 conjugates may bind to monocytes resulting in background staining (1).

Dual-Color Reagents. MultiMix Dual-Color Reagents for flow cytometry are based on the combination of two antibodies labeled with FITC and RPE, respectively. This combination is particularly effective as both fluorochromes can be excited at 488 nm, and the fluorescence emission for FITC is in the green region around 530 nm while the RPE emission is in the

orange region above 570 nm. Dual-Color Reagents are excellent for distinguishing different cell populations simultaneously.

Triple-Color Reagents. MultiMix Triple-Color Reagents for flow cytometry are based on the combination of three antibodies labeled with FITC, RPE and APC, or FITC, RPE and RPE-Cy5, respectively. The Triple-Color Reagents are designed for flow cytometers equipped with a 488 nm (blue) light source for excitation of FITC, RPE and RPE-Cy5, and a 633/635 nm (red) light source for excitation of APC. The antibody and fluorochrome combinations are carefully chosen to provide convenient and reliable reagents for simultaneous identification of specific cell populations.

Performance Testing. All conjugates are thoroughly tested to confirm optimal performance in flow cytometry.

Solvent. The fluorochrome conjugates are offered in liquid form in buffer, containing 15 mmol/L sodium azide and 1% bovine serum albumin.

Storage. The conjugates should be stored in the dark at 2-8 °C.

Further Information. A package insert is supplied with each vial of conjugate. It provides product-specific details. Package inserts are also available on www.agilent.com.

The products require no hazard labeling.

References

1. van Vugt MJ, van den Herik-Oudijk IE, van de Winkel JGJ. Binding of PE-Cy5 conjugates to the human high-affinity receptor for IgG (CD64). *Blood* 1996;88:2358-61.

* The Pacific Blue™ antibody conjugates are sold under license from Life Technologies Corporation.

Flow Cytometers & Software

The Agilent line of NovoCyte flow cytometers provides an expanded set of capabilities that accommodate today's high-end and increasingly sophisticated multi-color flow cytometry assays.

Laboratories now have the flexibility to choose 1-5 lasers, and up to 30 fluorescence channels. When throughput is essential, the auto-sampling capabilities can be integrated into different laboratory automation platforms, efficiently process both FACS tubes (using a 40-tube rack) and 24-, 48-, 96-, and 384-well plates, and allow for walk-away sample acquisition. The intuitive and industry leading NovoExpress software has been further advanced, providing an exceptional user experience in data acquisition, analysis and reporting.

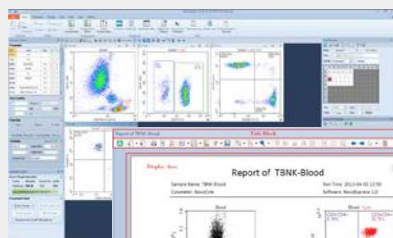
- Expanded flexibility with 1-5 lasers and up to 30 fluorescence channel options, customizable, and upgradeable
- Sample recovery mode serves to collect unused sample at end of acquisition
- Excellent sensitivity and resolution
- Intuitive and powerful software for data acquisition, analysis, and reporting
- Smart-design functionalities and walk-away operation simplify your workflow

- Automation-ready capability for high-throughput needs
- Wide, 7.2-log dynamic range eliminates the need for routine detector adjustments
- High-speed collection up to 100,000 events/second
- Accurate absolute cell count in every experiment, which eliminates the need for reference beads

Stable and consistent results on a daily basis

Equipped with high-quality lasers, optical filters and detectors to ensure consistent signal detection, and combined with fluidic feedback control mechanisms to maintain steady flow rates, you can rely on the NovoCyte line of flow cytometers. They have demonstrated superior stability across a wide range of sample flow rates, a critical requirement for flow cytometry to provide consistent results under variable operating conditions. Agilent flow cytometers give you peace of mind so you can focus more on your experiments.

Streamline your experiment's design, setup and data analysis with the NovoExpress software



Workspace + Report: NovoExpress user-friendly interface for easy access to settings, analysis, reports, and plates/sample layout.



Toolbar: Instrument toolbar showing quick access to QC and fluidic maintenance functions.



Heat map: Heat map data display.



NovoCyt



NovoCyt Advanteon



NovoCyt Quanteon



NovoCyt Penteon

NovoCyt Instrument Configurations

For more information on NovoCyt instruments, please visit www.agilent.com/chem/novocyt

Product	Lasers	349 nm	405 nm	488 nm	561 nm	637 nm	Max. No. of Fluorescence Channels
NovoCyt**	1			●			6
					●		6
	2		●	●			11
				●	●		11
				●		●	9
	3		●	●	●		15
				●	●	●	15
			●			●	13
NovoCyt Advanteon**	1			●			7
					●		6
	2		●	●			15
				●	●		13
				●		●	11
	3		●	●	●		21
				●	●	●	17
NovoCyt Quanteon**	4		●	●	●	●	25
NovoCyt Penteon*	5	●	●	●	●	●	30

* For Research Use Only. Not for use in diagnostic procedures.

** Selected configurations are registered as CE-IVD



Product Code Index – Reagents & Kits

Code	Product	Package size	Page
C			
C022201-2	Polyclonal Rabbit Anti-Human Kappa Light Chains/APC, Rabbit F(ab) ₂	100 tests, 1 mL	26
C706601-2	Monoclonal Mouse Anti-Human CD19/RPE-Cy5, Clone HD37	100 tests, 1 mL	20
C706701-2	Monoclonal Mouse Anti-Human CD3/RPE-Cy5, Clone UCHT1	100 tests, 1 mL	19
C709901-2	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/RPE-Cy5, Clone T29/33	100 tests, 1 mL	24
C722401-2	Monoclonal Mouse Anti-Human CD19/APC, Clone HD37	100 tests, 1 mL	20
C722501-2	Monoclonal Mouse Anti-Human CD3/APC, Clone UCHT1	100 tests, 1 mL	19
C722601-2	Monoclonal Mouse Anti-Human CD4/APC, Clone MT310	100 tests, 1 mL	19
C722701-2	Monoclonal Mouse Anti-Human CD8/APC, Clone DK25	100 tests, 1 mL	19
C723001-2	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/APC, Clone T29/33	100 tests, 1 mL	22
C723850-2	Monoclonal Mouse Anti-Human CD34 Class III/APC, Clone BIRMA-K3	50 tests, 0.5 mL	21
C724201-2	Monoclonal Mouse Anti-Human CD5/APC, Clone DK23	100 tests, 1 mL	19
C724401-2	Monoclonal Mouse Anti-Human CD117, c-kit/APC, Clone 104D2	100 tests, 1 mL	24
C724601-2	Monoclonal Mouse Anti-Human Myeloperoxidase/APC, Clone MPO-7	100 tests, 1 mL	26
C725201-2	Monoclonal Mouse Anti-Human CD79acy/APC, Clone HM57	100 tests, 1 mL	24
C725601-2	Monoclonal Mouse Anti-Human CD138/APC, Clone MI15	100 tests, 1 mL	24
C727801-2	Monoclonal Mouse Anti-Human CD64, Fc Gamma Receptor I/APC, Clone 10.1	100 tests, 1 mL	23
C728001-2	Monoclonal Mouse Anti-Human CD61, Platelet Glycoprotein IIIa/APC, Clone Y2/51	100 tests, 1 mL	23
C728101-2	Monoclonal Mouse Anti-Human CD22/APC, Clone 4KB128	100 tests, 1 mL	21
F			
F005801-2	Polyclonal Rabbit Anti-Human IgM/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	25
F018501-2	Polyclonal Rabbit Anti-Human IgG/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	25
F018801-2	Polyclonal Rabbit Anti-Human IgA/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	25
F018901-2	Polyclonal Rabbit Anti-Human IgD/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	25
F031302-2	Polyclonal Rabbit Anti-Mouse Immunoglobulins/FITC, Rabbit F(ab) ₂	2 mL	33
F037201-2	Polyclonal Rabbit Anti-Human Lysozyme EC 3.2.1.17/FITC	100 tests, 1 mL	26
F043401-2	Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	26
F043501-2	Polyclonal Rabbit Anti-Human Lambda Light Chains/FITC, Rabbit F(ab) ₂	100 tests, 1 mL	26
F047902-2	Polyclonal Goat Anti-Mouse Immunoglobulins/FITC, Goat F(ab) ₂	2 mL	33
F071301-2	Monoclonal Mouse Anti-Human CD11c, Protein 150,95/FITC, Clone KB90	100 tests, 1 mL	20
F071401-2	Monoclonal Mouse Anti-Human Myeloperoxidase/FITC, Clone MPO-7	100 tests, 1 mL	26
F076501-2	Monoclonal Mouse Anti-Human CD8/FITC, Clone DK25	100 tests, 1 mL	19
F076601-2	Monoclonal Mouse Anti-Human CD4/FITC, Clone MT310	100 tests, 1 mL	19
F076701-2	Monoclonal Mouse Anti-Human CD2/FITC, Clone MT910	100 tests, 1 mL	19
F076801-2	Monoclonal Mouse Anti-Human CD19/FITC, Clone HD37	100 tests, 1 mL	20
F078901-2	Monoclonal Mouse Anti-Human CD7/FITC, Clone DK24	100 tests, 1 mL	19
F079501-2	Monoclonal Mouse Anti-Human CD5/FITC, Clone DK23	100 tests, 1 mL	19
F079901-2	Monoclonal Mouse Anti-Human CD20/FITC, Clone B-Ly1	100 tests, 1 mL	20
F080001-2	Monoclonal Mouse Anti-Human CD45R0/FITC, Clone UCHL1	100 tests, 1 mL	22
F080101-2	Monoclonal Mouse Anti-Human CD25, Interleukin-2 Receptor/FITC, Clone ACT-1	100 tests, 1 mL	21
F080301-2	Monoclonal Mouse Anti-Human CD61, Platelet Glycoprotein IIIa/FITC, Clone Y2/51	100 tests, 1 mL	23
F081701-2	Monoclonal Mouse Anti-Human HLA-DP, DQ, DR Antigen/FITC, Clone CR3/43	100 tests, 1 mL	25
F081801-2	Monoclonal Mouse Anti-Human CD3/FITC, Clone UCHT1	100 tests, 1 mL	19
F082601-2	Monoclonal Mouse Anti-Human CD10/FITC, Clone SS2/36	100 tests, 1 mL	19
F082901-2	Monoclonal Mouse Anti-Human CD71, Transferrin Receptor/FITC, Clone Ber-T9	100 tests, 1 mL	23
F083001-2	Monoclonal Mouse Anti-Human CD15/FITC, Clone C3D-1	100 tests, 1 mL	20
F083101-2	Monoclonal Mouse Anti-Human CD13/FITC, Clone WM-47	100 tests, 1 mL	20
F083201-2	Monoclonal Mouse Anti-Human CD33/FITC, Clone WM-54	100 tests, 1 mL	21
F084401-2	Monoclonal Mouse Anti-Human CD14/FITC, Clone TÜK4	100 tests, 1 mL	20
F084901-2	Monoclonal Mouse Anti-Human CD30/FITC, Clone Ber-H2	100 tests, 1 mL	21
F086001-2	Monoclonal Mouse Anti-Human Epithelial Antigen/FITC, Clone Ber-EP4	100 tests, 1 mL	25
F086101-2	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/FITC, Clone T29/33	100 tests, 1 mL	22
F087001-2	Monoclonal Mouse Anti-Human CD235a, Glycophorin A/FITC, Clone JC159	100 tests, 1 mL	24
F701101-2	Monoclonal Mouse Anti-Human CD16, Fc Gamma Receptor III/FITC, Clone DJ130c	100 tests, 1 mL	20

Product Code Index – Reagents & Kits

Code	Product	Package size	Page
F705301-8	Monoclonal Mouse Anti-Human BCL2 Oncoprotein/FITC, Clone 124	100 tests, 1 mL	18
F706001-2	Monoclonal Mouse Anti-Human CD22/FITC, Clone 4KB128	100 tests, 1 mL	21
F706201-2	Monoclonal Mouse Anti-Human CD23/FITC, Clone MHM6	100 tests, 1 mL	21
F708101-2	Monoclonal Mouse Anti-Human CD34 Class III/FITC, Clone BIRMA-K3	100 tests, 1 mL	21
F708801-2	Monoclonal Mouse Anti-Human CD41, Platelet Glycoprotein IIb/FITC, Clone 5B12	100 tests, 1 mL	22
F710101-2	Monoclonal Mouse Anti-Human CD38/FITC, Clone AT13/5	100 tests, 1 mL	22
F710201-2	Monoclonal Mouse Anti-Human CD43/FITC, Clone DF-T1	100 tests, 1 mL	22
F711001-2	Monoclonal Mouse Anti-Human B Cell/FITC, Clone FMC7	100 tests, 1 mL	18
F711201-2	Monoclonal Mouse Anti-Human CD66abce/FITC, Clone Kat4c	100 tests, 1 mL	23
F713401-2	Monoclonal Mouse Anti-Human CD24/FITC, Clone SN3	100 tests, 1 mL	23
F713501-2	Monoclonal Mouse Anti-Human CD68/FITC, Clone KP1	100 tests, 1 mL	23
F713701-2	Monoclonal Mouse Anti-Human CD79β/FITC, Clone SN8	100 tests, 1 mL	24
F713801-2	Monoclonal Mouse Anti-Human CD103, Mucosa Lymphocyte Antigen/FITC, Clone Ber-ACT8	100 tests, 1 mL	24
F713950-2	Monoclonal Mouse Anti-Human Terminal Deoxynucleotidyl Transferase/FITC, Clone HT-6	50 tests, 0.5 mL	26
F714101-2	Monoclonal Mouse Anti-Human CD1a/FITC, Clone NA1/34	100 tests, 1 mL	18
F714301-8	Monoclonal Mouse Anti-Human CD54, ICAM-1/FITC, Clone 6.5B5	100 tests, 1 mL	22
F714901-2	Monoclonal Mouse Anti-Human Plasma Cell/FITC, Clone VS38c	100 tests, 1 mL	26
F717801-8	Monoclonal Mouse Anti-Human CD27/FITC, Clone M-T271	100 tests, 1 mL	21
F726601-2	Monoclonal Mouse Anti-Human HLA-DR Antigen/FITC, Clone AB3	100 tests, 1 mL	25
F726801-8	Monoclonal Mouse Anti-Human Ki-67 Antigen/FITC, Clone MIB-1	100 tests, 1 mL	26
F727001-2	Monoclonal Mouse Anti-Human CD57/FITC, Clone TB01	100 tests, 1 mL	23
F727601-2	Monoclonal Mouse Anti-Human CD7/FITC, Clone CBC.37	100 tests, 1 mL	19
FR04450-2	MultiMix Dual-Colour Reagent, Anti-Human Lambda Light Chains/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
FR04850-2	MultiMix Dual-Colour Reagent, Anti-Human Kappa Light Chains/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
FR48150-2	MultiMix Dual-Colour Reagent, Anti-Human Kappa Light Chains/FITC + Anti-Human Lambda Light Chains/RPE	50 tests, 0.5 mL	27
FR70050-2	MultiMix Dual-Colour Reagent, Anti-Human CD45/FITC + Anti-Human CD14/RPE	50 tests, 0.5 mL	27
FR72950-2	MultiMix Dual-Colour Reagent, Anti-Human CD5/FITC + Anti-Human CD20/RPE	50 tests, 0.5 mL	27
FR86650-2	MultiMix Dual-Colour Reagent, Anti-Human CD3/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
FR86750-2	MultiMix Dual-Colour Reagent, Anti-Human HLA-DP, DQ, DR Antigen/FITC + Anti-Human CD3/RPE	50 tests, 0.5 mL	27
FR86850-2	MultiMix Dual-Colour Reagent, Anti-Human CD4/FITC + Anti-Human CD8/RPE	50 tests, 0.5 mL	27
FR87550-2	MultiMix Dual-Colour Reagent, Anti-Human CD3/FITC + Anti-Human CD4/RPE	50 tests, 0.5 mL	27
FR88150-2	MultiMix Dual-Colour Reagent, Anti-Human CD3/FITC + Anti-Human CD8/RPE	50 tests, 0.5 mL	27
FR88250-2	MultiMix Dual-Colour Reagent, Anti-Human CD5/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
FR88350-2	MultiMix Dual-Colour Reagent, Anti-Human CD10/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
FR89450-2	MultiMix Dual-Colour Reagent, Anti-Human CD2/FITC + Anti-Human CD19/RPE	50 tests, 0.5 mL	27
K			
K007811-8	QIFIKIT®	10 calibrations	34
K011011-2	FluoroSpheres	40 tests	34
K231111-2	IntraStain	100 tests	34
K532711-8	Telomere PNA Kit/FITC for Flow Cytometry	20 duplicate tests	35
P			
PB98201-8	Monoclonal Mouse Anti-Human CD3/PB, Clone UCHT1	100 tests, 1 mL	19
PB98401-8	Monoclonal Mouse Anti-Human CD8/PB, Clone DK25	100 tests, 1 mL	19
PB98501-8	Monoclonal Mouse Anti-Human CD19/PB, Clone HD37	100 tests, 1 mL	20
PB98601-8	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/PB, Clone T29/33	100 tests, 1 mL	22
PR70101-2	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/PerCP, Clone 2D1	100 tests, 1 mL	22
PR70201-2	Monoclonal Mouse Anti-Human CD3/PerCP, Clone UCHT1	100 tests, 1 mL	19
PR70350-2	Monoclonal Mouse Anti-Human CD19/PerCP-Cy5.5, Clone HD37	100 tests, 0.5 mL	20
PR70450-2	Monoclonal Mouse Anti-Human Myeloperoxidase/PerCP-Cy5.5, Clone MPO-7	100 tests, 0.5 mL	26
PR70650-2	Monoclonal Mouse Anti-Human CD34 Class III/PerCP-Cy5.5, Clone BIRMA-K3	100 tests, 0.5 mL	21
PR70750-2	Monoclonal Mouse Anti-Human CD22/PerCP-Cy5.5, Clone 4KB128	100 tests, 0.5 mL	21
PR71050-2	Monoclonal Mouse Anti-Human CD1a/PerCP-Cy5.5, Clone NA1/34	100 tests, 0.5 mL	18
PR71150-2	Monoclonal Mouse Anti-Human CD7/PerCP-Cy5.5, Clone CBC.37	100 tests, 0.5 mL	19
PR71250-2	Polyclonal Rabbit Anti-Human Lambda Light Chains/PerCP-Cy5.5	100 tests, 0.5 mL	26
PR71350-2	Monoclonal Mouse Anti-Human Plasma Cell/PerCP-Cy5.5, Clone VS38c	100 tests, 0.5 mL	26

Product Code Index – Reagents & Kits

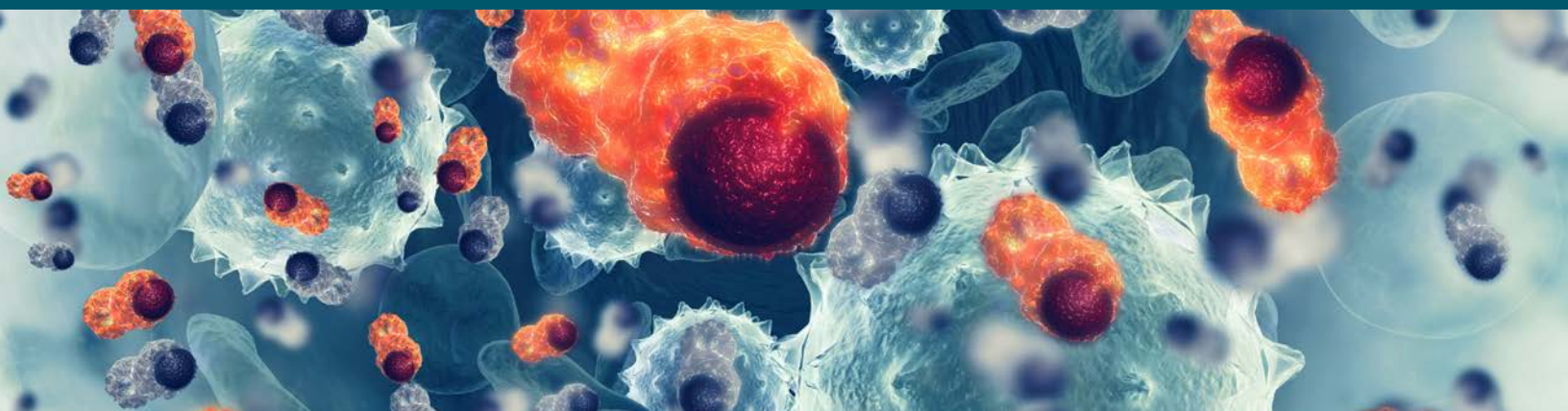
Code	Product	Package size	Page
R			xx
R043601-2	Polyclonal Rabbit Anti-Human Kappa Light Chains/RPE, Rabbit F(ab') ₂	100 tests, 1 mL	26
R043701-2	Polyclonal Rabbit Anti-Human Lambda Light Chains/RPE, Rabbit F(ab') ₂	100 tests, 1 mL	26
R043901-2	Polyclonal Rabbit Anti-Mouse Immunoglobulins/RPE, Rabbit F(ab') ₂	1 mL	33
R048001-2	Polyclonal Goat Anti-Mouse Immunoglobulins/RPE, Goat F(ab') ₂	1 mL	33
R071501-2	Monoclonal Mouse Anti-Human CD13/RPE, Clone WM-47	100 tests, 1 mL	20
R074501-2	Monoclonal Mouse Anti-Human CD33/RPE, Clone WM-54	100 tests, 1 mL	21
R080501-2	Monoclonal Mouse Anti-Human CD4/RPE, Clone MT310	100 tests, 1 mL	19
R080601-2	Monoclonal Mouse Anti-Human CD8/RPE, Clone DK25	100 tests, 1 mL	19
R080701-2	Monoclonal Mouse Anti-Human CD2/RPE, Clone MT910	100 tests, 1 mL	19
R080801-2	Monoclonal Mouse Anti-Human CD19/RPE, Clone HD37	100 tests, 1 mL	20
R081001-2	Monoclonal Mouse Anti-Human CD3/RPE, Clone UCHT1	100 tests, 1 mL	19
R081101-2	Monoclonal Mouse Anti-Human CD25, Interleukin-2 Receptor/RPE, Clone ACT-1	100 tests, 1 mL	21
R084101-8	Monoclonal Mouse Anti-Human CD11b, C3bi Receptor/RPE, Clone 2LPM19c	100 tests, 1 mL	20
R084201-2	Monoclonal Mouse Anti-Human CD5/RPE, Clone DK23	100 tests, 1 mL	19
R084301-2	Monoclonal Mouse Anti-Human CD45R0/RPE, Clone UCHL1	100 tests, 1 mL	22
R084801-2	Monoclonal Mouse Anti-Human CD10/RPE, Clone SS2/36	100 tests, 1 mL	19
R086401-2	Monoclonal Mouse Anti-Human CD14/RPE, Clone TÜK4	100 tests, 1 mL	20
R511101-2	Polyclonal Rabbit Anti-Human IgM/RPE, Rabbit F(ab') ₂	100 tests, 1 mL	25
R511201-2	Polyclonal Rabbit Anti-Human IgD/RPE, Rabbit F(ab') ₂	100 tests, 1 mL	25
R700001-2	Monoclonal Mouse Anti-Human HLA-ABC Antigen/RPE, Clone W6/32	100 tests, 1 mL	25
R701201-2	Monoclonal Mouse Anti-Human CD16, Fc Gamma Receptor III/RPE, Clone DJ130c	100 tests, 1 mL	20
R701301-2	Monoclonal Mouse Anti-Human CD20/RPE, Clone B-Ly1	100 tests, 1 mL	20
R701401-2	Monoclonal Mouse Anti-Human CD42b, Platelet Glycoprotein Ib/RPE, Clone AN51	100 tests, 1 mL	22
R705801-2	Monoclonal Mouse Anti-Human CD41, Platelet Glycoprotein IIb/RPE, Clone 5B12	100 tests, 1 mL	22
R706101-2	Monoclonal Mouse Anti-Human CD22/RPE, Clone 4KB128	100 tests, 1 mL	21
R707801-2	Monoclonal Mouse Anti-Human CD235a, Glycophorin A/RPE, Clone JC159	100 tests, 1 mL	24
R708601-2	Monoclonal Mouse Anti-Human CD45RA/RPE, Clone 4KB5	100 tests, 1 mL	22
R708701-2	Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen/RPE, Clone T29/33	100 tests, 1 mL	22
R710801-2	Monoclonal Mouse Anti-Human CD23/RPE, Clone MHM6	100 tests, 1 mL	21
R712501-2	Monoclonal Mouse Anti-Human CD34 Class III/RPE, Clone BIRMA-K3	100 tests, 1 mL	21
R712701-2	Monoclonal Mouse Anti-Human CD56/RPE, Clone MOC-1	100 tests, 1 mL	23
R714401-2	Monoclonal Mouse Anti-Human CD38/RPE, Clone AT13/5	100 tests, 1 mL	22
R714501-2	Monoclonal Mouse Anti-Human CD117, c-kit/RPE, Clone 104D2	100 tests, 1 mL	24
R715901-2	Monoclonal Mouse Anti-Human CD79acy/RPE, Clone HM57	100 tests, 1 mL	24
R716401-8	Monoclonal Mouse Anti-Human CD28/RPE, Clone CD28.1	100 tests, 1 mL	21
R718801-2	Monoclonal Mouse Anti-Human CD103, Mucosa Lymphocyte Antigen/RPE, Clone Ber-ACT8	100 tests, 1 mL	24
R718901-2	Monoclonal Mouse Anti-Human CD1a/RPE, Clone NA1/34	100 tests, 1 mL	18
R720901-2	Monoclonal Mouse Anti-Human Myeloperoxidase/RPE, Clone MPO-7	100 tests, 1 mL	26
R721901-2	Monoclonal Mouse Anti-Human CD64, Fc Gamma Receptor I/RPE, Clone 10.1	100 tests, 1 mL	23
R722901-2	Monoclonal Mouse Anti-Human CD138/RPE, Clone MI15	100 tests, 1 mL	24
R725101-2	Monoclonal Mouse Anti-Human CD56/RPE, Clone C5.9	100 tests, 1 mL	23
R726701-2	Monoclonal Mouse Anti-Human HLA-DR Antigen/RPE, Clone AB3	100 tests, 1 mL	25
R727201-2	Monoclonal Mouse Anti-Human CD79β/RPE, Clone SN8	100 tests, 1 mL	24
R727701-2	Monoclonal Mouse Anti-Human CD7/RPE, Clone CBC.37	100 tests, 1 mL	19
S			
S236430-2	EasyLyse, Erythrocyte-Lysing Reagent	300 tests, 6 x 5 mL	34
S302430-2	Phosphate-Buffered Saline (PBS), pH 7.0	6 x 1 L	33

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Code	Product	Package size	Page
T			
TC05150-2	MultiMix Triple-Colour Reagent, Anti-Human Kappa Light Chains/FITC + Anti-Human Lambda Light Chains/RPE + Anti-Human CD19/RPE-Cy5	50 tests, 0.5 mL	31
TC64150-2	MultiMix Triple-Colour Reagent, Anti-Human CD8/FITC + Anti-Human CD4/RPE + Anti-Human CD3/RPE-Cy5	50 tests, 0.5 mL	31
TC66001-2	MultiMix Triple-Colour Reagent, Anti-Human CD8/FITC + Anti-Human CD4/RPE + Anti-Human CD3/APC	50 tests, 1 mL	28
TC66101-2	MultiMix Triple-Colour Reagent, Anti-Human CD16/FITC + Anti-Human CD56/RPE + Anti-Human CD3/APC	50 tests, 1 mL	29
TC66301-2	MultiMix Triple-Colour Reagent, Anti-Human CD20/FITC + Anti-Human CD5/RPE + Anti-Human CD19/APC	50 tests, 1 mL	29
TC66401-2	MultiMix Triple-Colour Reagent, Anti-Human CD5/FITC + Anti-Human CD10/RPE + Anti-Human CD19/APC	50 tests, 1 mL	28
TC66501-2	MultiMix Triple-Colour Reagent, Anti-Human CD103/FITC + Anti-Human CD11c/RPE + Anti-Human CD19/APC	50 tests, 1 mL	30
TC66601-2	MultiMix Triple-Colour Reagent, Anti-Human CD2/FITC + Anti-Human CD34 Class III/RPE + Anti-Human CD5/APC	50 tests, 1 mL	28
TC66701-2	MultiMix Triple-Colour Reagent, Anti-Human MPO/FITC + Anti-Human CD79acy/RPE + Anti-Human CD3/APC	50 tests, 1 mL	31
TC66801-2	MultiMix Triple-Colour Reagent, Anti-Human TdT/FITC + Anti-Human CD22/RPE + Anti-Human CD3/APC	50 tests, 1 mL	31
TC66901-2	MultiMix Triple-Colour Reagent, Anti-Human CD19/FITC + Anti-Human Lambda Light Chains/RPE + Anti-Human Kappa Light Chains/APC	50 tests, 1 mL	29
TC67001-2	MultiMix Triple-Colour Reagent, Anti-Human Plasma Cell/FITC + Anti-Human Lambda Light Chains/RPE + Anti-Human Kappa Light Chains/APC	50 tests, 1 mL	31
TC67101-2	MultiMix Triple-Colour Reagent, Anti-Human CD38/FITC + Anti-Human CD56/RPE + Anti-Human CD45/APC	50 tests, 1 mL	30
TC67401-2	MultiMix Triple-Colour Reagent, Anti-Human CD38/FITC + Anti-Human CD56/RPE + Anti-Human CD19/APC	50 tests, 1 mL	30
TC67501-2	MultiMix Triple-Colour Reagent, Anti-Human CD71/FITC + Anti-Human CD235a/RPE + Anti-Human CD45/APC	50 tests, 1 mL	30
TC67701-2	MultiMix Triple-Colour Reagent, Anti-Human CD2/FITC + Anti-Human CD7/RPE + Anti-Human CD3/APC	50 tests, 1 mL	28
TC68301-2	MultiMix Triple-Colour Reagent, Anti-Human B Cell (FMC7)/FITC + Anti-Human CD23/RPE + Anti-Human CD19/APC	50 tests, 1 mL	28
TC68501-2	MultiMix Triple-Colour Reagent, Anti-Human CD13/FITC + Anti-Human HLA-DR Antigen/RPE + Anti-Human CD117/APC	50 tests, 1 mL	29
TC68601-2	MultiMix Triple-Colour Reagent, Anti-Human CD33/FITC + Anti-Human CD34/RPE + Anti-Human CD117/APC	50 tests, 1 mL	29
TC68701-2	MultiMix Triple-Colour Reagent, Anti-Human CD41/FITC + Anti-Human CD34/RPE + Anti-Human CD61/APC	50 tests, 1 mL	30
TC68901-2	MultiMix Triple-Colour Reagent, Anti-Human CD19/FITC + Anti-Human CD34/RPE + Anti-Human CD22/APC	50 tests, 1 mL	29
TC69001-2	MultiMix Triple-Colour Reagent, Anti-Human CD3/FITC + Anti-Human CD19/RPE + Anti-Human CD45/APC	50 tests, 1 mL	27
X			
X092701-2	Control Reagent, Mouse IgG1/FITC	1 mL	32
X092801-2	Control Reagent, Mouse IgG1/RPE	1 mL	32
X092901-2	Control Reagent, Rabbit F(ab) ₂ /FITC	1 mL	32
X093001-2	Control Reagent, Rabbit F(ab) ₂ /RPE	1 mL	32
X093101-2	Control Reagent, Mouse IgG1	1 mL	32
X093250-2	MultiMix Dual-Colour Control Reagent, Mouse IgG1/FITC + Mouse IgG1/RPE	0.5 mL	32
X093301-2	Control Reagent, Mouse IgG2a/FITC	1 mL	32
X093550-2	MultiMix Dual-Colour Control Reagent, Rabbit F(ab) ₂ /FITC + Rabbit F(ab) ₂ /RPE	0.5 mL	32

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Code	Product	Package size	Page
X094950-2	MultiMix Dual-Colour Control Reagent, Mouse IgG1/FITC + Mouse IgG2a/RPE	0.5 mL	32
X095001-2	Control Reagent, Mouse IgG2a/RPE	1 mL	32
X095501-2	Control Reagent, Mouse IgG1/RPE-Cy5	1 mL	32
X095650-2	MultiMix Triple-Colour Control Reagent, Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/RPE-Cy5	0.5 mL	33
X095750-2	MultiMix Triple-Colour Control Reagent, Rabbit F(ab') ₂ /FITC + Rabbit F(ab') ₂ /RPE + Mouse IgG1/RPE-Cy5	0.5 mL	33
X096801-2	Control Reagent, Mouse IgG1/APC	1 mL	32
X097801-2	MultiMix Triple-Colour Control Reagent, Mouse IgG1/FITC + Mouse IgG1/RPE + Mouse IgG1/APC	1 mL	xx
X097901-2	MultiMix Triple-Colour Control Reagent, Mouse IgG1/FITC + Rabbit F(ab') ₂ /RPE + Rabbit F(ab') ₂ /APC	1 mL	32
X099801-2	Control Reagent, Rabbit F(ab') ₂ /APC	1 mL	32



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TECHNICAL DATA

PRODUCT: SPHERO™ Rainbow Calibration Particles, 8 Peaks, 3.0-3.4 µm

CAT. NO.: RCP-30-5A (EuroFlow™)

LOT NO.: EAM02

SIZE: 5 µm

CONCENTRATION: 1×10^7 particles/mL

STORAGE BUFFER: Deionized water with 0.02% Sodium Azide and 0.01% NP40

STORAGE TEMP.: Stable at room temperature. Store between 2 and 8° C after first use.

CAUTION: Do not freeze. Protect from light.

DESCRIPTION: This product contains a mixture of 3.4 µm Rainbow Particles in **eight** different fluorescent intensities. Every Rainbow particle contains a mixture of fluorophores that enable the Rainbow particles to be excited at any wavelength from 365 to 650 nm.

NOTE: Shake vigorously or vortex briefly before use. Inclusion of a small amount of detergent in the diluent will help to increase the number of singles. Diluted Particles can be stored in the refrigerator for future use. Expires one year after opening. Please record opening date on bottle.

INSTRUCTIONS FOR USE:

RCP-30-5A (EuroFlow™) are used with the EuroFlow™ standardization guidelines to study the initial PMT characterization, to set target MFI values, and to perform daily performance tracking of flow cytometers.

A. Preparation of Particles

1. Vortex the particles vigorously.
2. Dilute 3-5 drops to 1 mL of deionized water.

B. For the placement of PMT voltages for fluorescence measurements or for the determination of the EuroFlow™ SOP instrument settings visit: T Kalina, et al. on behalf of the EuroFlow Consortium (EU-FP6, LSHB-CT-2006-018708) (2012). EuroFlow standardization of flow cytometer instrument settings and immunophenotyping protocols. **Leukemia, 26: 1986-2010**. Related link: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3437409/>

C. For linearity assessment visit SPHERO™ Technical Note #8 Calibration and Performance Tracking of Flow Cytometer Using SPHERO™ Calibration Particles at https://www.spherotech.com/tech_SpheroTech_Note_8.html

D. For the determination of the flow cytometer sensitivity visit SPHERO™ Technical Note #17 Determination of a Flow Cytometer's Sensitivity Using Detection Efficiency (Q) and the Background Light Level (B) at https://www.spherotech.com/tech_SpheroTech_Note_17.html.

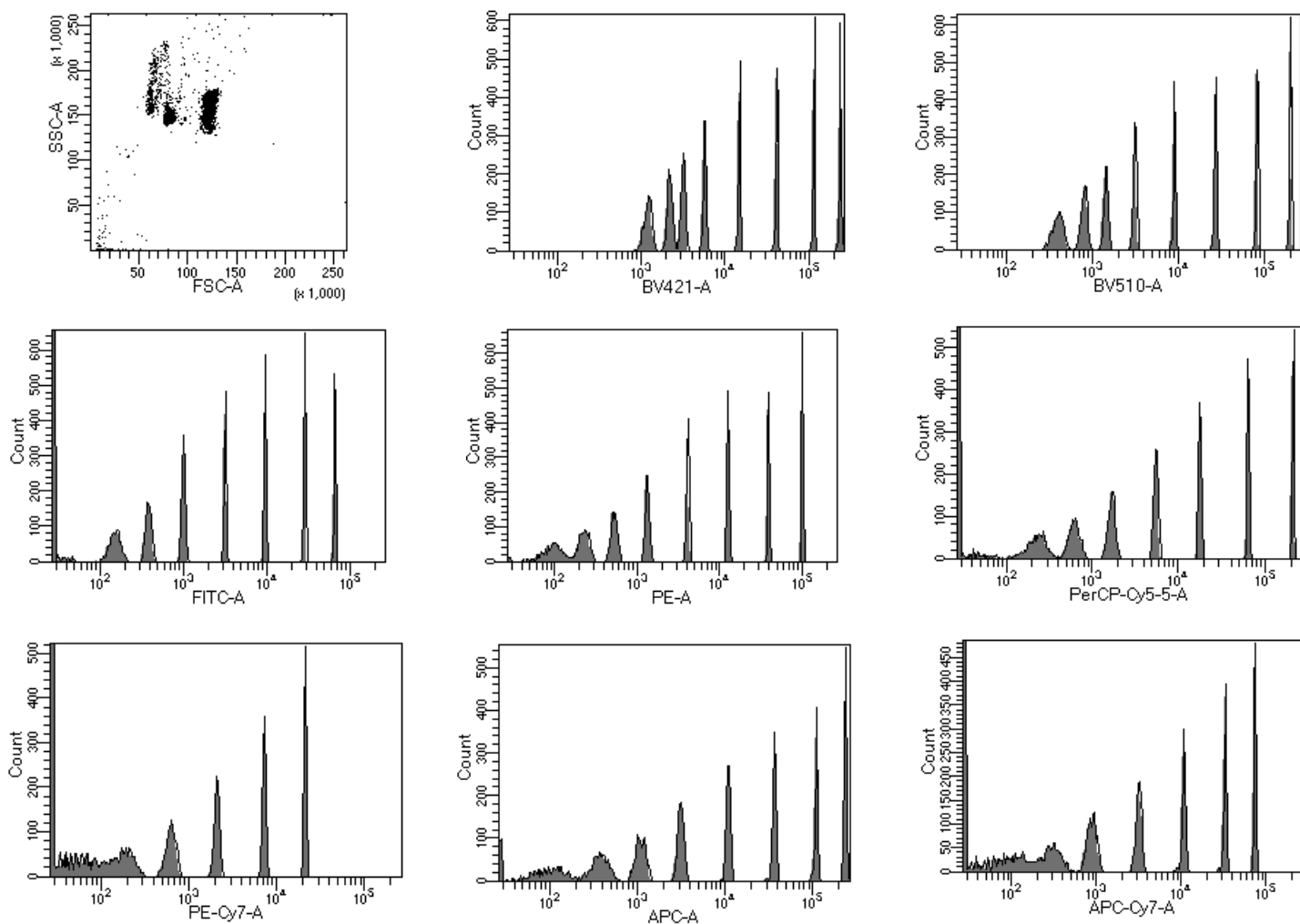
Molecules of Equivalent Fluorochrome (MEF) for RCP-30-5A (EuroFlow™)

Peak#	MEFL	MEPE	MEPTR	MECY	MEAP
1	N/A	N/A	N/A	N/A	N/A
2	789	443	187	1,137	736
3	1,896	1,245	543	3,041	1,892
4	4,872	3,415	1,536	7,960	4,804
5	15,619	11,299	5,423	25,995	14,248
6	47,116	35,875	17,825	82,663	42,425
7	143,912	112,460	63,989	294,040	113,026
8	333,068	287,758	207,649	973,175	227,044

**Dot Plot and Histograms for RCP-30-5A (EuroFlow™) on a
BD Biosciences LSRFortessa™ X-20 using Assigned Target Values**

**FACSCanto™ Fluorescence Intensity
Target Values for RCP-30-5A-7 (Peak 7)**

Channel	Lower MFI (-15%)	Target Value	Upper MFI (+15)
Pacific Blue	90,855	106,888	122,922
Pacific Orange	72,500	85,294	98,088
FITC	23,292	27,402	31,513
PE	32,666	38,430	44,195
PerCP-Cy5.5	57,874	68,087	78,301
PE-Cy7	6,774	7,969	9,165
APC	95,180	111,976	128,773
APC-H7	28,594	33,641	38,687



SPHERO™ Rainbow Calibration Particles (EuroFlow™)
CATALOG NO.: RCP-30-5A EuroFlow™ LOT NO.: EAM02