

Datasheet: 4C001

Description:	FOUR-COLOR HUMAN CD45RA/CD62L/CD3/CD8 FLOW KIT
Specificity:	CD45RA/CD62L/CD3/CD8
Format:	4 Color
Product Type:	Four Color Reagent
Clone:	F8-11-13 / FMC46 / UCHT1 / LT8
Isotype:	Cocktail
Quantity:	50 TESTS/0.5ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Product Form

Four color combination consisting of FITC, RPE, RPE-Cy5.5 and APC conjugated monoclonal antibodies mixed in optimal ratio - lyophilised.

FITC conjugated CD45RA (Mouse IgG1)
 RPE conjugated CD62L (Mouse IgG2b)
 RPE-Cy5.5 conjugated CD3 (Mouse IgG1)
 APC conjugated CD8 (Mouse IgG1)

Reconstitution

Reconstitute with 0.5ml distilled water

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	APC	650	661
	FITC	490	525
	RPE 488nm laser	496	578
	RPE 561nm laser	546	578
	RPE-Cy5.5 488nm laser	496	695
	RPE-Cy5.5 561nm laser	546	695

Buffer Solution

Phosphate buffered saline

Preservative

0.09% Sodium Azide (NaN₃)

Stabilisers

1% Bovine Serum Albumin
 5% Sucrose

External Database**Links****UniProt:**

[P08575](#) [Related reagents](#)
[P14151](#) [Related reagents](#)
[P07766](#) [Related reagents](#)
[P01732](#) [Related reagents](#)

Entrez Gene:

[5788](#) PTPRC [Related reagents](#)
[6402](#) SELL [Related reagents](#)
[916](#) CD3E [Related reagents](#)
[925](#) CD8A [Related reagents](#)

Synonyms

CD45, LNHR, LYAM1, MAL, T3E

Specificity

Four-Color Human CD45RA/CD62L/CD3/CD8 Flow Kit can be used for single-step identification of suppressor/cytotoxic naïve T-cells (CD3+CD8+CD45RA+CD62L+) and suppressor/cytotoxic memory T-cell subsets (CD3+CD8+CD45RA+CD62L-, CD3+CD8+CD45RA-CD62L- or CD3+CD8+CD45RA-CD62L+).

CD3 is a member of the immunoglobulin superfamily, which acts as a mediator of signal transduction, through association with the α/β or γ/δ T-cell receptor (TCR). Mammalian CD3 is a multimeric protein composed of four distinct polypeptide chains (ϵ , γ , δ , ζ), consisting of two heterodimers ($\epsilon\gamma$, $\epsilon\delta$) and one homodimer ($\zeta\zeta$). CD3 is expressed by a high-percentage of circulating peripheral T-cells and is considered a pan T-cell marker. Clone UCHT1 specifically recognizes the 20kDa CD3 ϵ chain.

CD8 is a cell surface glycoprotein which acts as a co-receptor for MHC Class I, in conjunction with the T-cell receptor (TCR). CD8 exists as a dimer, composed of two α chains or more commonly as an $\alpha\beta$ heterodimer. The CD8 antigen is expressed on the human suppressor/cytotoxic T-cell subset (CD3+CD8+) and on a subset of NK cells. Binding of CD8 to MHC class I, acts to enhance resting T-cell activation. Clone LT8 is specific for the CD8 α chain.

CD45RA is an isoform of CD45, a member of the protein tyrosine phosphatase family, otherwise known as leucocyte common antigen (LCA), which acts as a positive regulator of T-cell co-activation, and is essential for the activation of T-cells through the antigen receptor. CD45RA is expressed by naïve T-cells and is down-regulated during activation.

CD62L is a cell surface adhesion protein, and member of the selectin/LECAM family, otherwise known as leukocyte-endothelial cell adhesion molecule 1 (LECAM1), which acts as a mediator of lymphocyte homing to high endothelial venules (HEVs), within peripheral lymphoid tissues. CD62L is constitutively expressed by all leucocytes including naïve T-cells, but only by certain subpopulations of memory T-cells. Levels of serum CD62L can be used as an indicator of inflammation.

Flow CytometryUse 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

Storage

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

[FLOW CYTOMETRY ABSOLUTE COUNT STANDARD™ \(FCSC580\)](#)
[ERYTHROLYSE RED BLOOD CELL LYSING BUFFER \(10x\) \(BUF04B\)](#)
[ERYTHROLYSE RED BLOOD CELL LYSING BUFFER \(10x\) \(BUF04C\)](#)
[HUMAN SEROBLOCK \(BUF070A\)](#)
[HUMAN SEROBLOCK \(BUF070B\)](#)

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