

DESCRIPTION

Species Reactivity	Human
Specificity	Detects CD45RA in direct ELISA.
Source	Monoclonal Mouse IgG _{2A} Clone # 1069433
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Whole cells (naïve T cells) Accession # P08575
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet(SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	PBMC lymphocytes

DATA

Flow Cytometry

Detection of CD45RA in PBMC lymphocytes by Flow Cytometry
 PBMC lymphocytes were stained with Mouse Anti-Human CD45RO PE-conjugated Monoclonal Antibody (Catalog # FAB10642P) and either (A) Mouse Anti-Human CD45RA mFluor™ Violet 450-Conjugated Monoclonal Antibody (Catalog # FAB11444MFV450) or (B) unstained. View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C, as supplied. • 1 month, 2 to 8 °C under sterile conditions after opening. • 6 months, -20 to -70 °C under sterile conditions after opening.

BACKGROUND

This monoclonal antibody specifically binds to the 220 kDa isoform of human CD45, CD45RA. CD45RA is a single chain type I glycoprotein that is encoded by the human PTPRC gene. In humans, CD45RA is one of six isoforms of the CD45 complex. These different isoforms are the result of alternative splicing and some of the other isoforms include CD45RO, CD45RB, and CD45RC. CD45RO, CD45RB, CD45RC, and CD45RA are primarily expressed on T cells. CD45RA contains exon 4 but lacks both exons 5 and 6. CD45RO contains exons 3, 7, and 8 but not RA, RB, and RC exons. Phenotypically, CD45RA is highly expressed on naïve T cells whereas CD45RO is expressed on activated and memory T cells. Other cell types such as activated monocytes and B cells can also express CD45RO. Both CD45RA and CD45RO are used to characterize different subsets of Memory T cells.

PRODUCT SPECIFIC NOTICES

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