abcam

Product datasheet

PE Anti-CD45RO antibody [UCHL1] ab77217

1 Image

Overview

Product name	PE Anti-CD45RO antibody [UCHL1]
Description	PE Mouse monoclonal [UCHL1] to CD45RO
Host species	Mouse
Conjugation	PE. Ex: 488nm, Em: 575nm
Specificity	Recognizes CD45R0, a 180 kDa low molecular weight isoform of the leukocyte common antigen (LCA). The antigen is expressed on a subset of memory/activated T cells and on cortical thymocytes.
Tested applications	**Suitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Tissue, cells or virus corresponding to Human CD45RO. Human IL-2 dependent T cells
Positive control	Flow Cyt: Human peripheral blood lymphocytes.
General notes	The conjugate is purified by size exclusion chromatography and adjusted for direct use in flow cytometry. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze. Store In the Dark.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 0.1% Gelatin, 0.88% Sodium chloride, 0.12% Monobasic dihydrogen sodium phosphate
Purity	Affinity purified
Clonality	Monoclonal

Clone number	UCHL1
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab77217 in the following tested applications.

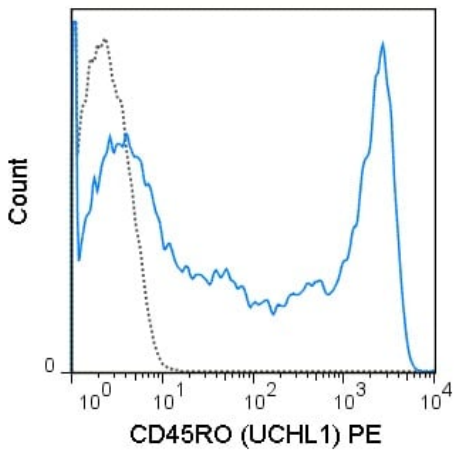
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 5µl for 10^{5-8} cells. Use 5µl in a final volume of 100µl. **ab91363** - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

Function	Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity.
Involvement in disease	Defects in PTPRC are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (T(-)B(+)NK(+) SCID) [MIM:608971]. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development. Genetic variations in PTPRC are involved in multiple sclerosis susceptibility (MS) [MIM:126200]. MS is a neurodegenerative disorder characterized by the gradual accumulation of focal plaques of demyelination particularly in the periventricular areas of the brain. Peripheral nerves are not affected. Onset usually in third or fourth decade with intermittent progression over an extended period. The cause is still uncertain.
Sequence similarities	Belongs to the protein-tyrosine phosphatase family. Receptor class 1/6 subfamily. Contains 2 fibronectin type-III domains. Contains 2 tyrosine-protein phosphatase domains.
Domain	The first PTPase domain interacts with SKAP1.
Post-translational modifications	Heavily N- and O-glycosylated.
Cellular localization	Membrane. Membrane raft. Colocalized with DPP4 in membrane rafts.

Images



Flow Cytometry - PE Anti-CD45RO antibody [UCHL1] (ab77217)

Human peripheral blood lymphocytes stained with 5µL (0.5µg) ab77217 (solid line) or 0.5µg PE-conjugated mouse IgG2a isotype control (dashed line).

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