# abcam

## Product datasheet

## PE Anti-CD45 antibody [MEM-28], prediluted ab134202

### **5 References** 1 Image

#### Overview

Product name PE Anti-CD45 antibody [MEM-28], prediluted

**Description** PE Mouse monoclonal [MEM-28] to CD45, prediluted

Host species Mouse

**Conjugation** PE. Ex: 488nm, Em: 575nm

**Specificity** ab134202 reacts with all alternative forms of Human CD45.

Tested applications Suitable for: Flow Cyt
Species reactivity Reacts with: Human

**Immunogen**Tissue, cells or virus corresponding to Human CD45. Human thymocytes and T lymphocytes.

**Positive control** Flow Cyt: Human peripheral blood cells.

General notes ab134202 is designed for Flow Cytometry analysis of Human blood cells using 20 μl reagent /

100  $\mu$ l of whole blood or  $10^6$  cells in a suspension.

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.

**Storage buffer** pH: 7.4

Preservative: 0.1% Sodium azide Constituents: 99% PBS, 0.2% BSA

PuritySize exclusionClonalityMonoclonalClone numberMEM-28

**Isotype** IgG1

1

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab134202 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 20µl for 10 <sup>6</sup> cells.  ab91357 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

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#### **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.

#### 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.

The first PTPase domain interacts with SKAP1.

## Post-translational

modifications

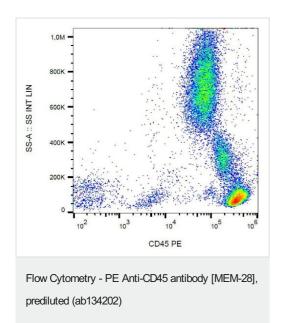
**Domain** 

Heavily N- and O-glycosylated.

#### **Cellular localization**

Membrane. Membrane raft. Colocalized with DPP4 in membrane rafts.

#### **Images**



Flow Cytometry analysis of human peripheral blood cells labeling CD45 with Anti-CD45 antibody [MEM-28], prediluted (Phycoerythrin) (ab134202).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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