

Product datasheet

PE/DyLight™ 594 Anti-CD45 antibody [MEM-28] ab223183

Overview

| | |
|----------------------------|---|
| Product name | PE/DyLight™ 594 Anti-CD45 antibody [MEM-28] |
| Description | PE/DyLight™ 594 Mouse monoclonal [MEM-28] to CD45 |
| Host species | Mouse |
| Conjugation | PE/DyLight™ 594 |
| Tested applications | Suitable for: Flow Cyt |
| Species reactivity | Reacts with: Human Does not react with: Horse |
| Immunogen | Tissue, cells or virus corresponding to Human CD45. Human thymocytes and T lymphocytes. |
| General notes | <p>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.</p> <p>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</p> |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C. Store In the Dark. |
| Storage buffer | pH: 7.4 Preservative: 0.0975% Sodium azide Constituent: PBS |
| Purity | Size exclusion |
| Clonality | Monoclonal |
| Clone number | MEM-28 |
| Isotype | IgG1 |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab223183 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 at an assay dependent concentration. ab223183 is designed for Flow Cytometry analysis of human blood cells using 4 ul reagent / 100 ul of whole blood or 10 ⁶ cells in a suspension. |

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.

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.

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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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