abcam

Product datasheet

FITC Anti-CD45 antibody [104] ab210184

1 Image

Overview

Product name FITC Anti-CD45 antibody [104]

Description FITC Mouse monoclonal [104] to CD45

Host species Mouse

Conjugation FITC. Ex: 493nm, Em: 528nm

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

Immunogen The details of the immunogen for this antibody are not available.

Positive control C57BI/6 splenocytes.

General notes The 104 antibody reacts with mouse CD45.2, also known as Ly5.2, which is a strain-specific

allelic form of the CD45 Leukocyte Common Antigen (LCA). The antibody has been demonstrated to specific for CD45.2 and is not cross-reactive with CD45.1-bearing cells.

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. Store In the Dark.

Storage buffer pH: 7.20

Preservative: 0.09% Sodium azide

Constituents: 0.12% Monobasic dihydrogen sodium phosphate, 0.87% Sodium chloride, 0.1%

Gelatin

Purity Protein A purified

Purification notes ab210184 was purified from tissue culture supernatant via affinity chromatography. The purified

antibody was conjugated under optimal conditions, with unreacted dye removed from the

preparation.

Clonality Monoclonal

Clone number104IsotypeIgG2aLight chain typekappa

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab210184 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. Use 0.25 μg.

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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.

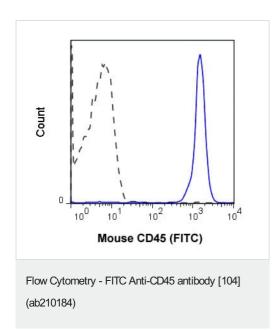
Domain The first PTPase domain interacts with SKAP1.

Post-translational modifications

Heavily N- and O-glycosylated.

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

Images



Flow cytometric analysis of C57Bl6 splenocytes labeling CD45 with 0.25 μ g ab210184 (solid line), compared with 0.25 μ g FITC Mouse lgG2a isotype control (dashed line).

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