abcam

Product datasheet

PerCP/Cy5.5® Anti-CD45R antibody [RA3-6B2] ab210342

1 References 1 Image

Overview

Product name PerCP/Cy5.5® Anti-CD45R antibody [RA3-6B2]

Description PerCP/Cy5.5® Rat monoclonal [RA3-6B2] to CD45R

Host species Rat

Conjugation PerCP/Cy5.5®. Ex: 482nm, Em: 690nm

Tested applications
Suitable for: Flow Cyt
Reacts with: Mouse
Positive control
C57Bl/6 splenocytes.

General notesThe 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 ab210342 was purified from tissue culture supernatant via affinity chromatography. The purified

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

preparation.

ClonalityMonoclonalClone numberRA3-6B2IsotypeIgG2a

1

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab210342 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.

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.

The first PTPase domain interacts with SKAP1.

Post-translational modifications

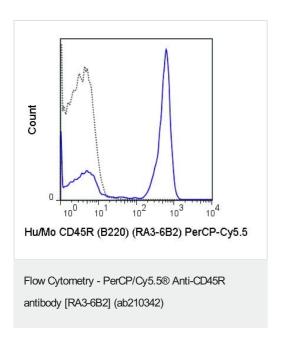
Heavily N- and O-glycosylated.

Cellular localization

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

Images

Domain



Flow cytometric analysis of C57Bl/6 splenocytes labeling CD45R with 0.25 μ g ab210342 (solid line), compared with 0.25 μ g PerCP-Cy5.5 Rat lgG2a isotype control (dashed line).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors