

Product datasheet

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

1 Image

Overview

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<b>Product name</b>	Anti-CD45R antibody [RA3-6B2] (PerCP/Cy5.5®)
<b>Description</b>	Rat monoclonal [RA3-6B2] to CD45R (PerCP/Cy5.5®)
<b>Host species</b>	Rat
<b>Conjugation</b>	PerCP/Cy5.5®. Ex: 482nm, Em: 690nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Cat, Human
<b>Positive control</b>	C57Bl/6 splenocytes.

Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Store In the Dark.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.09% Sodium azide Constituents: 0.12% Monobasic dihydrogen sodium phosphate, 0.87% Sodium chloride, 0.1% Gelatin
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	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.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	RA3-6B2
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

Applications

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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
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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.

### Domain

The first PTPase domain interacts with SKAP1.

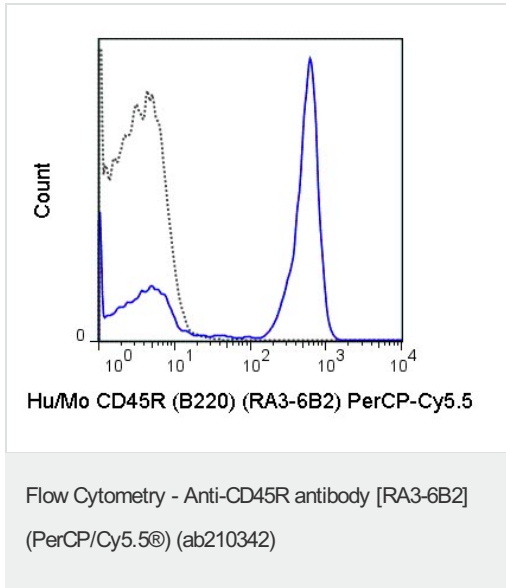
### Post-translational modifications

Heavily N- and O-glycosylated.

### Cellular localization

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

## Images



Flow cytometric analysis of C57Bl/6 splenocytes labeling CD45R with 0.25 µg ab210342 (solid line), compared with 0.25 µg PerCP-Cy5.5 Rat IgG2a isotype control (dashed line).

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

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