

### PE Anti-CD45RB antibody [C363.16A] ab25647

[1 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	PE Anti-CD45RB antibody [C363.16A]
<b>Description</b>	PE Rat monoclonal [C363.16A] to CD45RB
<b>Host species</b>	Rat
<b>Conjugation</b>	PE. Ex: 488nm, Em: 575nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Tissue, cells or virus corresponding to Mouse CD45RB. Cloned mouse Th cell line
<b>Epitope</b>	ab25647 reacts with an exon B dependent epitope of CD45 glycoprotein.
<b>Positive control</b>	BALB/c mice splenocytes
<b>General notes</b>	<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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Store In the Dark.
<b>Storage buffer</b>	<p>pH: 7.3</p> <p>Preservative: 0.09% Sodium azide</p> <p>Constituents: PBS, 16% Sucrose</p> <p>Also contains a stabilizing agent.</p>
<b>Purity</b>	Affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	C363.16A
<b>Isotype</b>	IgG2a

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab25647 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 0.2µg for 10 <sup>6</sup> cells.

## 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.

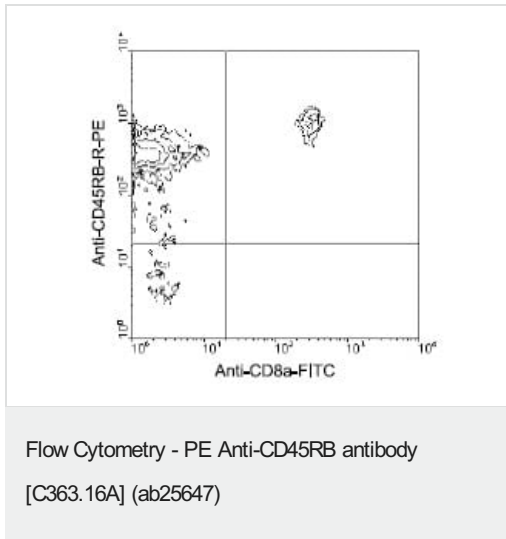
### Post-translational modifications

Heavily N- and O-glycosylated.

### Cellular localization

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

## Images



BALB/c splenocytes were double-stained with ab25647 (0.1 µg for 10<sup>6</sup> cells) and rat anti-mouse CD8a-FITC. Small lymphocytes were then gated and analyzed on a flow cytometer.

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

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