# abcam

### Product datasheet

# APC/Cy7® Anti-CD45R antibody [RA3-6B2] ab79107

## 1 Image

Overview

Product name APC/Cy7® Anti-CD45R antibody [RA3-6B2]

**Description** APC/Cy7® Rat monoclonal [RA3-6B2] to CD45R

Host species Rat

**Conjugation** APC/Cy7®. Ex: 650nm, Em: 774nm

Tested applications Suitable for: Flow Cyt

Species reactivity Reacts with: Mouse

**Immunogen** Tissue, cells or virus corresponding to Mouse CD45R. Abelson murine leukemia virus-induced

pre-B tumor cells

**Positive control**Cells from murine mesenteric lymph nodes.

General notes

This product or portions thereof is manufactured under license from Carnegie Mellon University

under U.S. Patent Number 5, 268, 486 and related patents. Cy® and CyDye® are trademarks of

Cytiva.

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.

Storage buffer pH: 7.20

Preservative: 0.09% Sodium azide

Constituents: 0.14% Monobasic dihydrogen sodium phosphate, 0.87% Sodium chloride, 0.1%

Gelatin

Stabilizing agent.

**Purity** Affinity purified

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Purification notes Purified from TCS

Clonality Monoclonal
Clone number RA3-6B2
Isotype IgG2a
Light chain type kappa

#### **Applications**

The Abpromise guarantee Our Abp

Our Abpromise guarantee covers the use of ab79107 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.

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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.

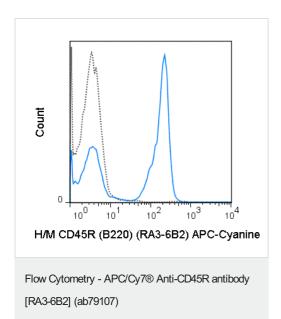
**Domain** The first PTPase domain interacts with SKAP1.

Post-translational modifications

Heavily N- and O-glycosylated.

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

#### **Images**



Flow cytometry of C57Bl/6 splenocytes labeling CD45R with ab79107 at 0.25 µg (solid line), or Rat IgG2a isotype control at 0.25 µg (dashed line).

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

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