

## Product datasheet

# Anti-CD45 antibody [F10-89-4] (Cy5 ®) ab82004

★ ★ ★ ☆ ☆ 2 Abreviews

### Overview

---

<b>Product name</b>	Anti-CD45 antibody [F10-89-4] (Cy5 ®)
<b>Description</b>	Mouse monoclonal [F10-89-4] to CD45 (Cy5 ®)
<b>Host species</b>	Mouse
<b>Conjugation</b>	Cy5 ®. Ex: 650nm, Em: 667nm
<b>Specificity</b>	ab82004 is specific to CD45.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, IHC-Fr, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	The details of the immunogen for this antibody are not available.
<b>General notes</b>	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 GE Healthcare Limited.

Abcam is committed to meeting high standards of ethical manufacturing and has decided to discontinue this product by July 2018 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause.

### Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituent: PBS
	Also contains a stabilizing agent.
<b>Purity</b>	IgG fraction
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	F10-89-4
<b>Isotype</b>	IgG2a

### Applications

Our [Abpromise guarantee](#) covers the use of **ab82004** 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		
IHC-Fr		
IP		
WB		

**Application notes**

Flow Cyt: Use 10 µl for 10<sup>6</sup> cells.  
IHC-Fr: Use at an assay dependent dilution.  
IP: Use at an assay dependent dilution.  
WB: Use at an assay dependent dilution. Predicted molecular weight: 147 kDa.

Not yet tested in other applications.  
Optimal dilutions/concentrations should be determined by the end user.

## 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.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## **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 <http://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