# abcam

## Product datasheet

# Anti-CD45 antibody [30-F11] - Low endotoxin, Azide free ab185744

★★★★ 1 Abreviews 1 Image

#### Overview

Product name Anti-CD45 antibody [30-F11] - Low endotoxin, Azide free

**Description** Rat monoclonal [30-F11] to CD45 - Low endotoxin, Azide free

Host species Rat

Tested applications Suitable for: Flow Cyt
Species reactivity Reacts with: Mouse

**Immunogen** The details of the immunogen for this antibody are not available.

**Positive control** Mouse bone marrow cells and splenocytes.

General notes

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

1XPBS W/O NaN3

Carrier free Yes

**Purity** Affinity purified

Purification notes Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by the LAL assay.

**Clonality** Monoclonal

Clone number 30-F11

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**lsotype** lgG2b **Light chain type** kappa

# **Applications**

## The Abpromise guarantee

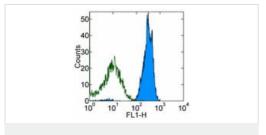
Our <u>Abpromise guarantee</u> covers the use of ab185744 in the following tested applications.

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 0.5 µg for 10 <sup>5</sup> -10 <sup>8</sup> cells.
		<u>ab18536</u> - Rat monoclonal lgG2b, is suitable for use as an isotype control with this antibody.

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-Ill 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 Cytometry - Anti-CD45 antibody [30-F11] - Low endotoxin, Azide free (ab185744)

Flow cytometry analysis of mouse splenocytes cells with 0.25  $\mu g$  of purified rat  $\lg G2b$  isotope control (open histogram) or 0.25  $\mu g$  of ab185744 followed by anti-rat  $\lg G$  FITC (filled histogram). Cells in the lymphocyte gate were used for analysis.

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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