

### APC Anti-CD45 antibody [30-F11] ab210224

1 Image

#### Overview

<b>Product name</b>	APC Anti-CD45 antibody [30-F11]
<b>Description</b>	APC Rat monoclonal [30-F11] to CD45
<b>Host species</b>	Rat
<b>Conjugation</b>	APC. Ex: 645nm, Em: 660nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	The details of the immunogen for this antibody are not available.
<b>Positive control</b>	C57Bl/6 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: 7.20</p> <p>Preservative: 0.09% Sodium azide</p> <p>Constituents: 0.1% Gelatin, 0.87% Sodium chloride, 0.12% Monobasic dihydrogen sodium phosphate</p>
<b>Purity</b>	Affinity purified
<b>Purification notes</b>	ab210224 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>	30-F11

<b>Isotype</b>	IgG2b
<b>Light chain type</b>	kappa

## Applications

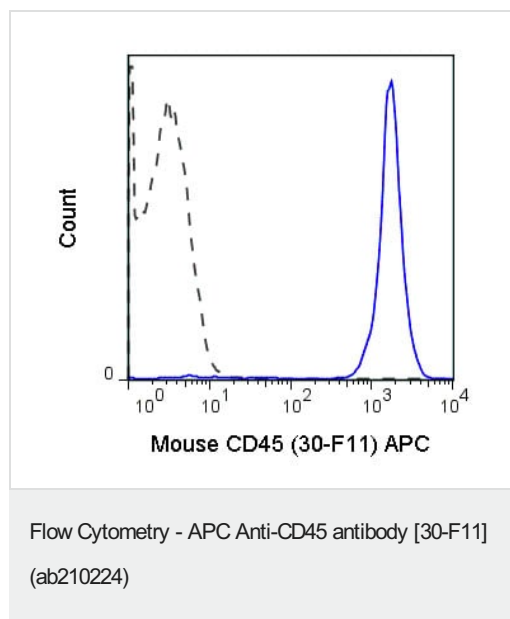
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab210224 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration. Use 0.125 µg/test.

## Target

<b>Function</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the protein-tyrosine phosphatase family. Receptor class 1/6 subfamily. Contains 2 fibronectin type-III domains. Contains 2 tyrosine-protein phosphatase domains.
<b>Domain</b>	The first PTPase domain interacts with SKAP1.
<b>Post-translational modifications</b>	Heavily N- and O-glycosylated.
<b>Cellular localization</b>	Membrane. Membrane raft. Colocalized with DPP4 in membrane rafts.

## Images



Flow cytometric analysis of C57Bl/6 splenocytes labeling CD45 with 0.125 µg ab210224 (solid line), compared with 0.125 µg Rat IgG2b Allophycocyanin isotype control (dashed line).

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

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