abcam

Product datasheet

Anti-CD45 antibody [OX30] ab6329

2 References 1 Image

Overview

Product name Anti-CD45 antibody [OX30]

Description Mouse monoclonal [OX30] to CD45

Host species Mouse

Tested applications Suitable for: Flow Cyt

Species reactivity Reacts with: Rat

Immunogen This product was produced with the following immunogens:

Full length protein. This information is proprietary to Abcam and/or its suppliers.

Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.

Positive control Flow Cyt: Lewis rat splenocytes.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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 Preservative: 0.02% Sodium azide

Constituent: PBS

Purify Protein G purified

Purification notes Purified from TCS.

Clonality Monoclonal

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Clone number OX30
Isotype IgG2a
Light chain type kappa

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab6329 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 a concentration of 0.2 µg/ml.

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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.

The first PTPase domain interacts with SKAP1.

Post-translational

Domain

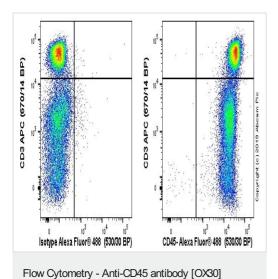
modifications

Heavily N- and O-glycosylated.

Cellular localization

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

Images



Lewis rat splenocytes stained with ab6329 (right) or mouse IgG2ax (left). Lewis rat splenocytes were incubated for 30 min on ice in 10% rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab6329) or mouse IgG2ax Isotype (ab18450) (1x10 6 in 100 μ I at 0.2 μ g/mI) for 30 min on ice.

The secondary antibody Goat Anti-Mouse IgG H&L (Alexa Fluor [®] 488, pre-adsorbed) (<u>ab150117</u>) was used at 1/2000 dilution for 30 min at 4°C. The cells were simultaneously stained with CD3 APC antibody.

Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable lymphocytes.

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

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- Replacement or refund for products not performing as stated on the datasheet
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- 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 **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

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