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Product datasheet

Recombinant Human CD45 protein ab177717

1 Image

Description

Product name	Recombinant Human CD45 protein
Purity	> 95 % SDS-PAGE. ab177717 was purified using conventional chromatography techniques.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	NP_002829
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSVMIA AQGPLKETIG DFWQMIFQRK VKVIVMLTEL KHGDQEICAQ YWGEGKQTYG DIEVDLKDTD KSSTYTLRVF ELRHSKRKDS RTVYQYQYTN WSVEQLPAEP KELISMIQVV KQKLPQKNSS EGNKHHKSTP LLIHCRDGSQ QTGIFCALLN LLESAETEEV VDIFQVVKAL RKARPGMVST FEQYQFLYDV IASTYPAQNG QVKKNNHQED KIEFDNE
Predicted molecular weight	30 kDa including tags
Amino acids	1031 to 1251
Tags	His-DDDDK tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab177717** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Mass Spectrometry SDS-PAGE
Mass spectrometry	MALDI-TOF
Form	Liquid

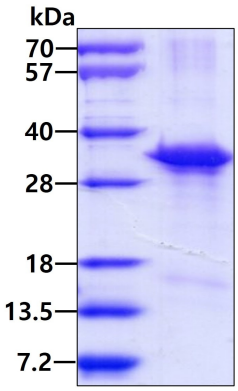
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.32% Tris HCl, 0.88% Sodium chloride, 10% Glycerol (glycerin, glycerine), 0.02% DTT

General Info

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.

Images



SDS-PAGE - Recombinant Human CD45 protein (ab177717)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

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