

Recombinant Mouse CD45/PTPRC Protein (Fc Tag)

Catalog No. PKSM040526

Note: Centrifuge before opening to ensure complete recovery of vial contents.

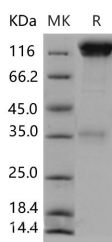
Description

Synonyms	B220;Cd45;CD45R;L-CA;loc;Ly-5;Lyt-4;T200
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met1-Lys425
Accession	NP_035340.3
Calculated Molecular Weight	71.7 kDa
Observed molecular weight	118 kDa
Tag	C-hFc
Bioactivity	Immobilized human SEMA4D-His at 10 µg/ml (100 µl/well) can bind mouse PTPRC-Fc with a linear range of 0.625-5 µg/ml.

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of

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cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Protein tyrosine phosphatase, receptor type C (CD45), also known as PTPRC is a member of the protein tyrosine phosphatase (PTP) family which is known for its function to serve as signaling molecules and to regulate a variety of cellular processes such as cell proliferation, differentiation, mitotic cycle and oncogenic transformation. CD45 is found expression specifically in hemotopietic cells. CD45 consists of an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains. It serves as an essential regulator of T-cell and B-cell antigen receptor signaling through either direct interaction with components of the antigen receptor complex or by activating various Src family kinases required for the antigen receptor signaling and it also can suppress JAK kinases.