Recombinant Protein Technical Manual

Recombinant Mouse CD45/PTPRC Protein (Fc Tag)(Active)

RPES5159

Product Data:

Product SKU: RPES5159

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_035340.3

Protein Information:

Molecular Mass:	71.7 kDa
AP Molecular Mass:	118 kDa
Tag:	C-Fc
Bio-activity:	Measured by its binding ability in a functional ELISA. 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.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	B220;Cd45;CD45R;L-CA;loc;Ly-5;Lyt-4;T200

Immunogen Information:

Sequence: Met1-Lys425

Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of 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 complexs or by activating various Src family kinases required for the antigen receptor signaling and it also can suppress JAK kinases.