Datasheet for ABIN7320005

CD45 Protein

1 Image

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Overview

Quantity:	100 µg
Target:	CD45 (PTPRC)
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Mouse CD45/PTPRC Protein (Active)
Sequence:	Arg453-Ser1152
Characteristics:	A DNA sequence encoding the mouse PTPRC (Arg453-Ser1152) was fused with five amino acids (DDDDK) at the C-terminus was expressed and purified.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	1. The specific activity was determined to be 9168 nmol/min/mg using p-nitrophenyl phosphate as substrate.2. Measured by its binding ability in a functional ELISA. Immobilized mouse PTPRC (453-1152) at 10 µg/ml (100 µl/well) can bind biotinylated human Galectin-1 with a linear range of 0.31-2.5 µg/ml.

Target Details

Target:	CD45 (PTPRC)

Target Details

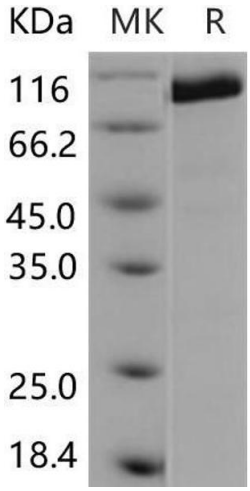
Alternative Name:	CD45/PTPRC (PTPRC Products)
Background:	Background: The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function 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. Synonym: B220,Cd45,CD45R,L-CA,loc,Ly-5,Lyt-4,T200
Molecular Weight:	81 kDa
Pathways:	TCR Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, CXCR4-mediated Signaling Events, BCR Signaling

Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, 3 mM DTT, pH 7.4
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.

