

Datasheet for ABIN7320923

CD45 Protein (His tag)





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Overview

Quantity:	50 μg
Target:	CD45 (PTPRC)
Origin:	Mouse
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD45 protein is labelled with His tag.
Product Details	

Purpose:	Recombinant Mouse CD45/PTPRC (C-6His)
Sequence:	Gln26Lys566
Characteristics:	Recombinant Mouse Receptor-type Tyrosine-protein Phosphatase C is produced by our Mammalian expression system and the target gene encoding Gln26-Lys566 is expressed with a 6His tag at the C-terminus.
Purity:	>95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	CD45 (PTPRC)	
Alternative Name:	CD45/PTPRC (PTPRC Products)	
Background:	Background: 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. It is a variably glycosylated 180-220 kDa transmembrane protein that is abundantly expressed on all nucleated cells of hematopoietic origin. CD45 has several isoforms, expressed according to cell type, developmental stage and antigenic exposure. CD45 has been best studied in T cells, where it determines T cell receptor signaling thresholds. CD45 is moved into or out of the immunological synapse (IS) membrane microdomain depending on the relative influence of interaction with the extracellular galectin lattice or the intracellular actin cytoskeleton. Galectin interaction can be fine-tuned by varying usage of the heavily 0-glycosylated spliced regions and sialylation of N-linked carbohydrates. Within the IS, CD45 dephosphorylates and negatively regulates the src family kinase, LCK. In other leukocytes, CD45 influences differentiation and links immunoreceptor signaling with cytokine secretion and cell survival, partially overlapping in function with DEP-1/CD148. CD45 deletion causes in severe immunodeficiency, while point mutations may be associated with autoimmune disorders.

Synonym: B220, CD45 antigen, CD45, CD45R, LCA, L-CA, LY5, protein tyrosine phosphatase, receptor type, C, PTPRC, receptor-type tyrosine-protein phosphatase C

Molecular	Weight:
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59.5 kDa

UniProt:

P06800

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:

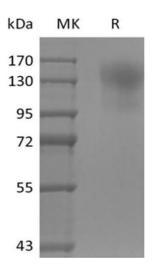
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Handling

Handling	
Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	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.

Images



Western Blotting

Image 1.