

Human CD45/PTPRC Protein

Cat. No. PTP-HM104

Description

Source	Recombinant Human CD45/PTPRC Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln26-Lys577.
Accession	P08575-3
Molecular Weight	The protein has a predicted MW of 61.9 kDa. Due to glycosylation, the protein migrates to 118-150 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

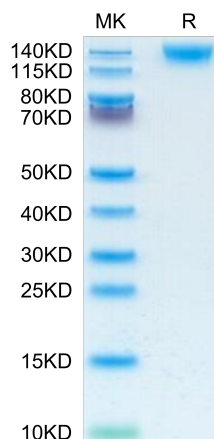
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

PTPRC (also known as CD45), T cells require the protein tyrosine phosphatase CD45 to detect and respond to antigen because it activates the Src family kinase Lck, which phosphorylates the T cell antigen receptor (TCR) complex. CD45 activates Lck by opposing the negative regulatory kinase Csk. Paradoxically, CD45 has also been implicated in suppressing TCR signaling by dephosphorylating the same signaling motifs within the TCR complex upon which Lck acts.

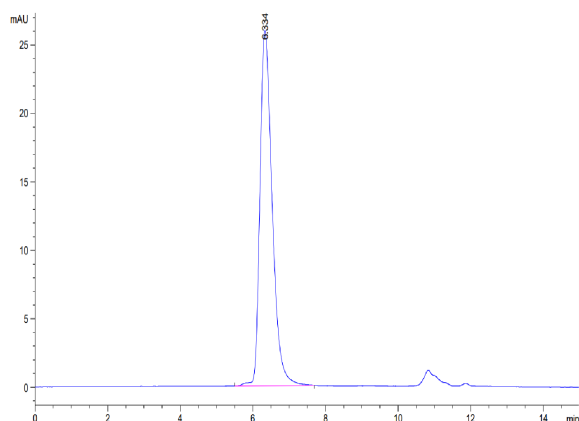
Assay Data

Bis-Tris PAGE



Human CD45 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



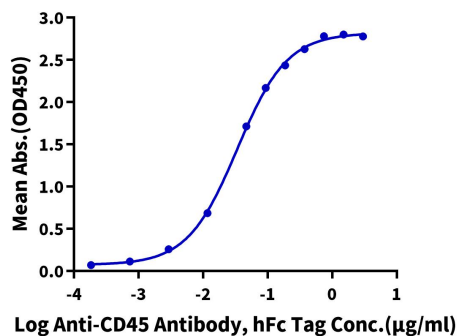
The purity of Human CD45 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human CD45, His Tag ELISA

0.5µg Human CD45, His Tag Per Well



Immobilized Human CD45, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD45 Antibody, hFc Tag with the EC50 of 34.0ng/ml determined by ELISA (QC Test).