

Human CD45/PTPRC Protein

Cat. No. PTP-HM404

Description

Source	Recombinant Human CD45/PTPRC Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gln26-Ile416.
Accession	P08575-4
Molecular Weight	The protein has a predicted MW of 47.3 kDa. Due to glycosylation, the protein migrates to 80-110 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

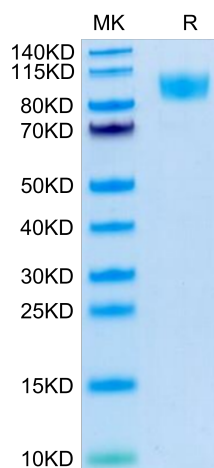
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days 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

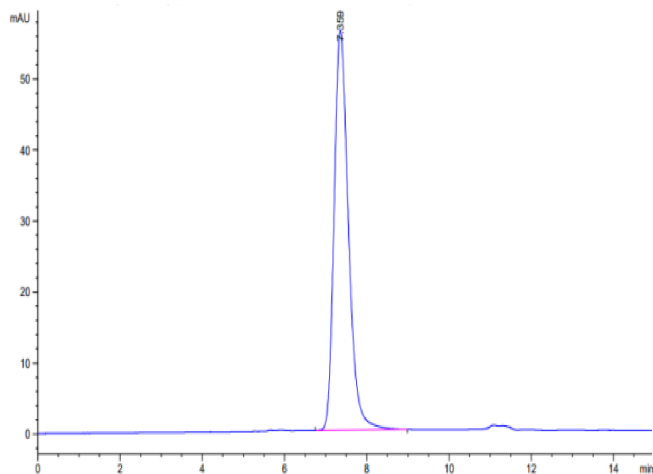
Tris-Bis PAGE



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

SEC-HPLC

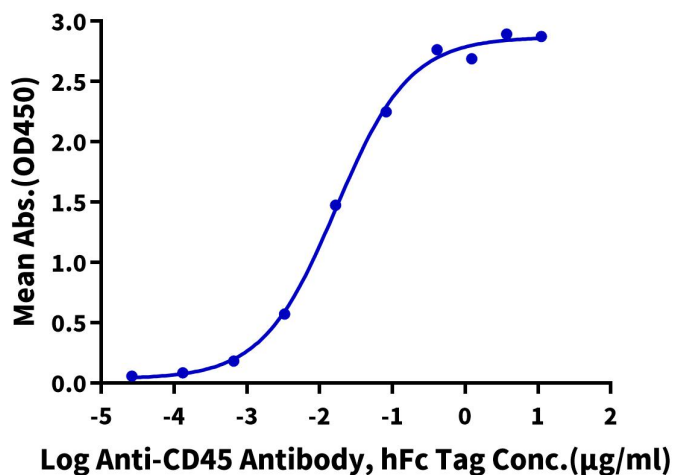
Assay Data



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

ELISA Data

Human CD45, His Tag ELISA
0.05µg Human CD45, His Tag Per Well



Immobilized Human CD45, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD45 Antibody, hFc Tag with the EC50 of 16.9ng/ml determined by ELISA.