

# Biotinylated Human CD45/PTPRC Protein

Cat. No. PTP-HM404B

## Description

<b>Source</b>	Recombinant Biotinylated Human CD45/PTPRC Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gln26-Lys416.
<b>Accession</b>	P08575-4
<b>Molecular Weight</b>	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.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

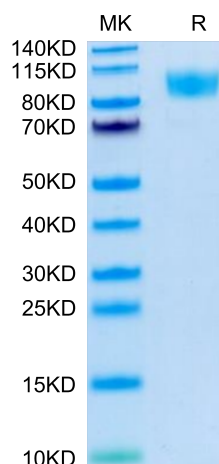
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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



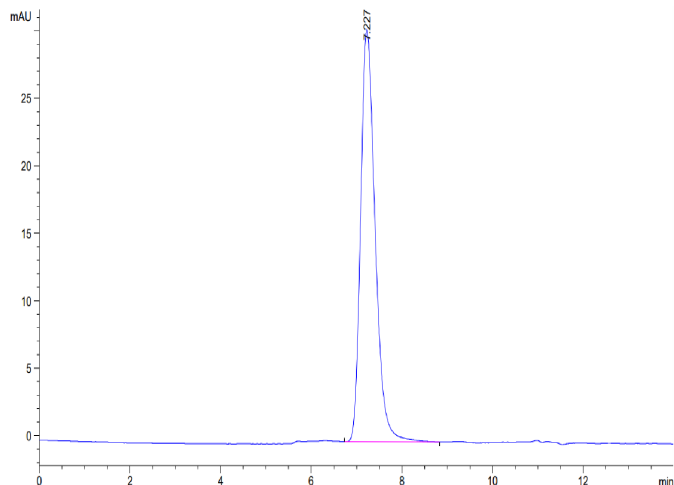
Biotinylated Human CD45 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

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## Assay Data

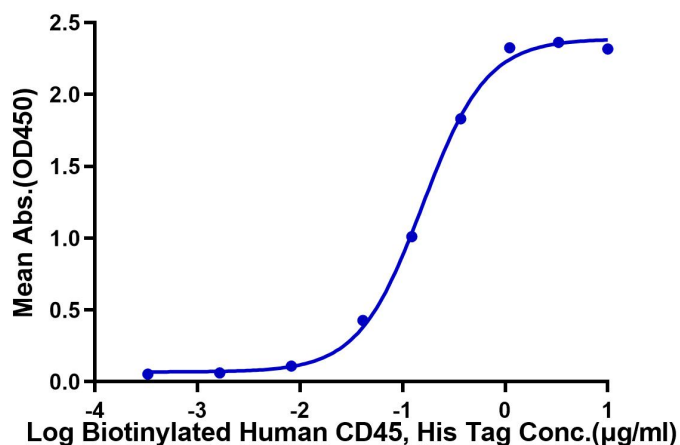


The purity of Biotinylated Human CD45 is greater than 95% as determined by SEC-HPLC.

## ELISA Data

### Biotinylated Human CD45, His Tag ELISA

0.2µg Anti-CD45 Antibody, hFc Tag Per Well



Immobilized Anti-CD45 Antibody at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human CD45, His Tag with the EC50 of 0.16µg/ml determined by ELISA.