

# Recombinant Human PTPRC/CD45RABC/CD45 Protein

Catalog No.: RP00396 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	5788	P08575-3

### Tags

C-hFc

### Synonyms

L-CA; CD45; T200; PTPRC; B220; CD45R; GP180; LCA; LY5; EC 3.1.3.48

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE > 95% by HPLC

Calculated MW	Observed MW
87.53 kDa	120-160 kDa

### Endotoxin

&lt; 1 EU/μg of the protein by LAL method

### Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## 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.

## Basic Information

### Description

Recombinant Human PTPRC/CD45RABC/CD45 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln26-Lys577) of Human PTPRC/CD45RABC/CD45 (Accession #P08575-3) fused with a C-hFc tag at the C-terminus.

### Bio-Activity

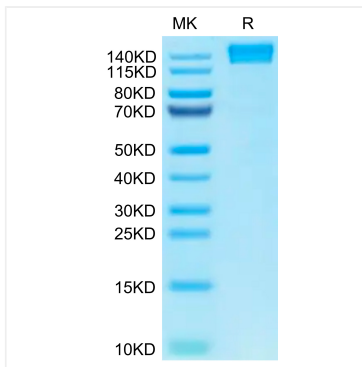
#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

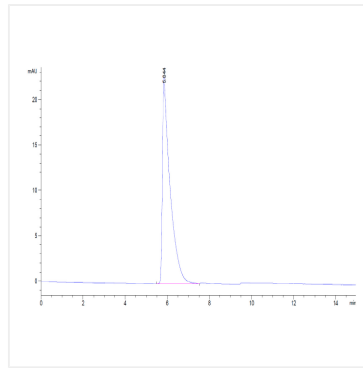
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

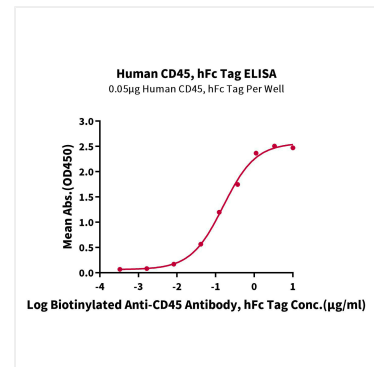
## Validation Data



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



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



Immobilized Human CD45, hFc Tag at 0.5 µg/mL (100 µL/well) on the plate. Dose response curve for Biotinylated Anti-CD45 Antibody, hFc Tag with the  $EC_{50}$  of 0.16 µg/mL determined by ELISA.