

# Recombinant Human PTPRC/CD45RABC/CD45 Protein

Catalog No.: RP00397 **Recombinant**

## Sequence Information

<b>Species</b>	<b>Gene ID</b>	<b>Swiss Prot</b>
Human	5788	P08575-3

### Tags

C-His

### Synonyms

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

## Product Information

<b>Source</b>	<b>Purification</b>
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

<b>Calculated MW</b>	<b>Observed MW</b>
61.9 kDa	118-150 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-His tag at the C-terminus.

### Bio-Activity

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### 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.

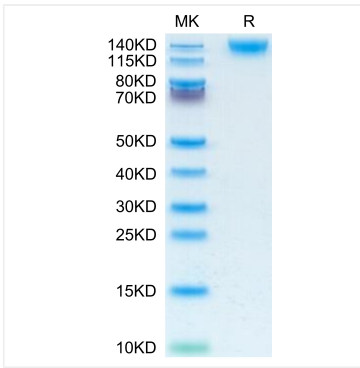
Avoid repeated freeze/thaw cycles.

### Operational Notes

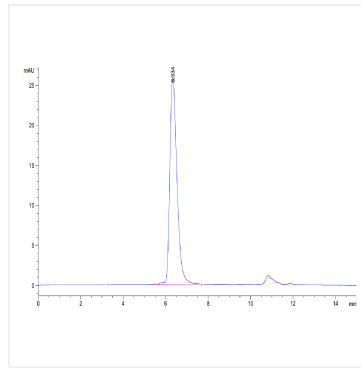
For your safety and health, please wear a lab coat and disposable gloves for handling.



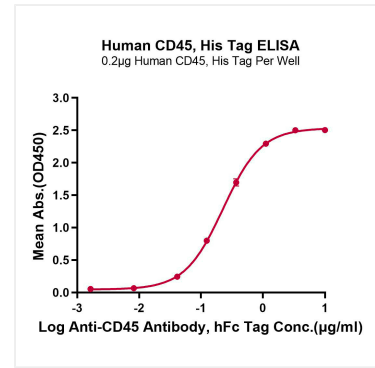
## Validation Data



Recombinant Human PTPRC/CD45RABC/CD45 Protein was determined by Tris-Bis PAGE under reducing conditions.



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



Immobilized Human CD45, His Tag at 2 µg/mL (100 µL/well) on the plate. Dose response curve for Anti-CD45 Antibody, hFc Tag with the EC<sub>50</sub> of 0.23 µg/mL determined by ELISA.