

# Human CD7 Protein

Cat. No. CD7-HM101

## Description

|                         |   |
|-------------------------|---|
| <b>Source</b>           | Recombinant Human CD7 Protein is expressed from HEK293 with His tag at the C-terminus.<br>It contains Ala26-Pro180.                 |
| <b>Accession</b>        | P09564  |
| <b>Molecular Weight</b> | The protein has a predicted MW of 18.04 kDa. Due to glycosylation, the protein migrates to 38-42 kDa based on Bis-Tris PAGE result. |
| <b>Endotoxin</b>        | Less than 0.1 EU per µg by the LAL method.  |
| <b>Purity</b>           | > 95% as determined by Bis-Tris PAGE<br>> 95% as determined by HPLC   |

## Formulation and Storage

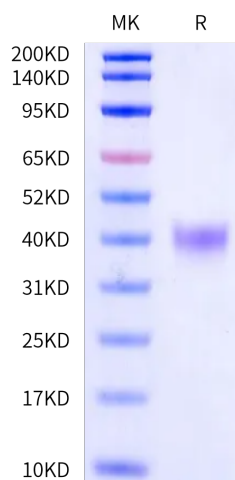
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.   |
| <b>Reconstitution</b> | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.   |
| <b>Storage</b>        | -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

CD7, also known as Leu-9, is an approximately 40 kDa glycosylated and palmitoylated transmembrane protein in the immunoglobulin superfamily. CD7 is expressed on T cells, NK cells, myeloid progenitor cells, and CD19 B progenitor cells. Among CD8 T cells, the CD7-bright population preferentially contains naïve and memory cells, while more weak expressors are primarily effector cells.

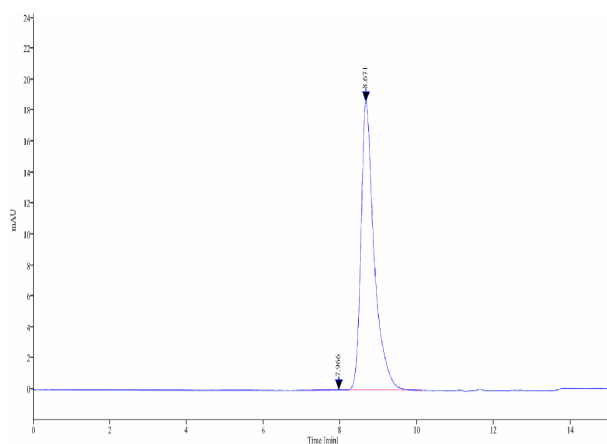
## Assay Data

### Bis-Tris PAGE



Human CD7 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

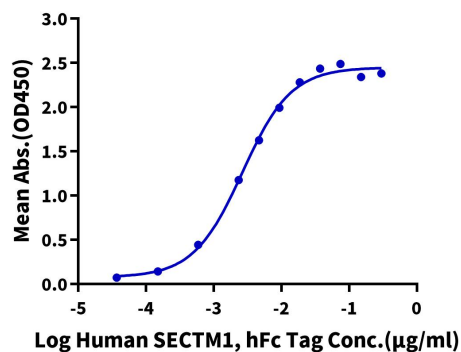
### SEC-HPLC



The purity of Human CD7 is greater than 95% as determined by SEC-HPLC.

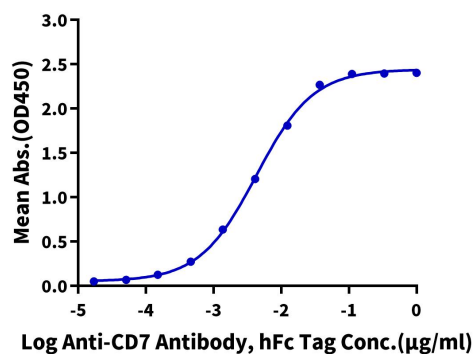
## Assay Data

## ELISA Data

**Human CD7, His Tag ELISA**0.1 $\mu$ g Human CD7, His Tag Per Well

Immobilized Human CD7, His Tag at 1 $\mu$ g/ml (100 $\mu$ l/well) on the plate. Dose response curve for Human SECTM1, hFc Tag (Cat. SEC-HM201) with the EC50 of 2.7ng/ml determined by ELISA.

## ELISA Data

**Human CD7, His Tag ELISA**0.05 $\mu$ g Human CD7, His Tag Per Well

Immobilized Human CD7, His Tag at 0.5 $\mu$ g/ml (100 $\mu$ l/well) on the plate. Dose response curve for Anti-CD7 Antibody, hFc Tag with the EC50 of 4.3ng/ml determined by ELISA.