

# Human CD28H/IGPR-1 Protein, Ultra Low Endotoxin

Cat. No. CD8-HM28H-UL

## Description

<b>Source</b>	Recombinant Human CD28H/IGPR-1 Protein is expressed from HEK293 with hFc (IgG1) tag at the C-Terminus. It contains Leu23-Gly150.
<b>Accession</b>	Q96BF3-1
<b>Molecular Weight</b>	The protein has a predicted MW of 40.7 kDa. Due to glycosylation, the protein migrates to 50-60 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

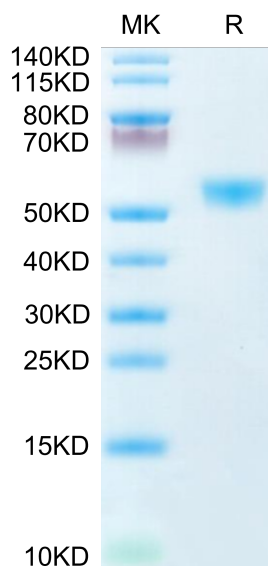
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage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

CD28H is constitutively expressed on all naive T cells. Repetitive antigenic exposure, however, induces a complete loss of CD28H on many T cells, and CD28H negative T cells have a phenotype of terminal differentiation and senescence. After extensive screening in a receptor array, a B7-like molecule, B7 homologue 5 (B7-H5), was identified as a specific ligand for CD28H.

## Assay Data

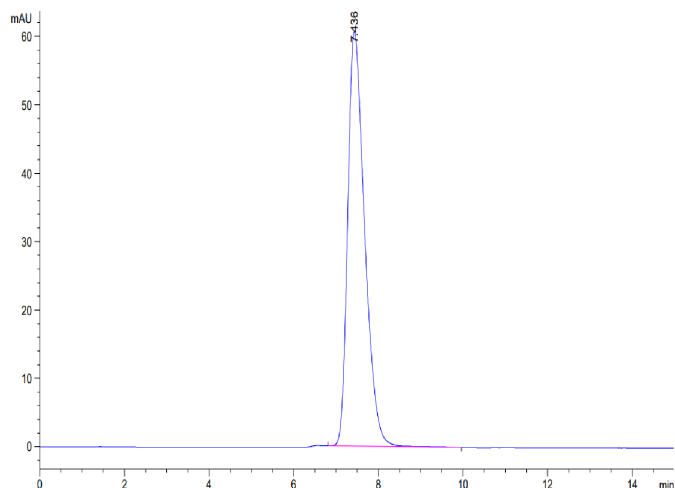
### Bis-Tris PAGE



Human CD28H on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

**Assay Data**

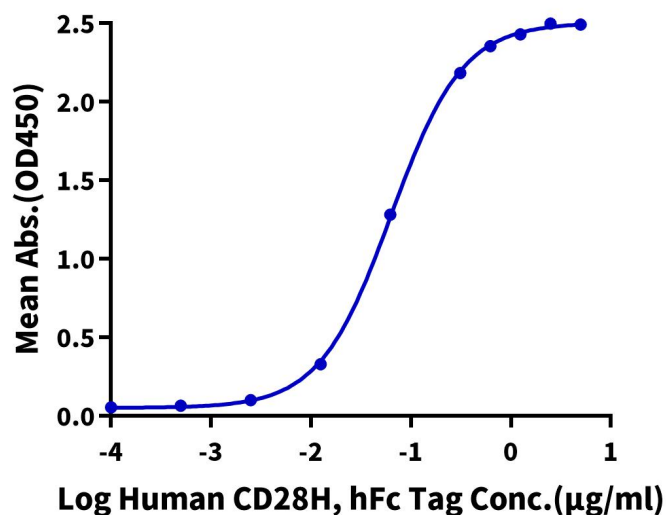


The purity of Human CD28H is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

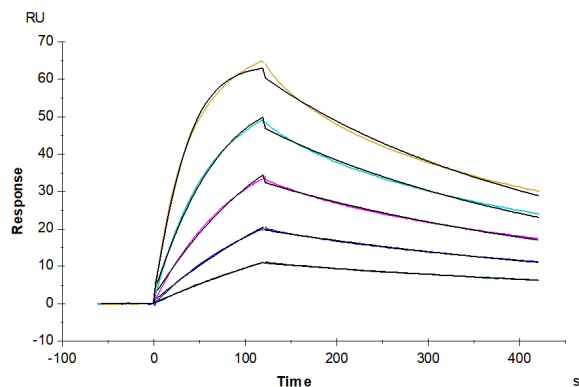
**Human CD28H, hFc Tag ELISA**

0.5µg Human B7-H7, His Tag Per Well



Immobilized Human B7-H7, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human CD28H, hFc Tag with the EC50 of 63.4ng/ml determined by ELISA (QC Test).

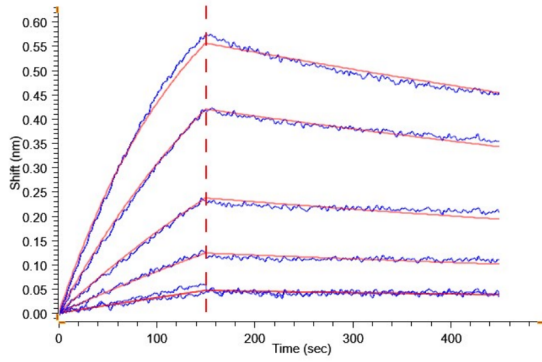
**SPR Data**



Cynomolgus B7-H7, His Tag captured on CM5 Chip via anti-his antibody can bind Human CD28H, hFc Tag with an affinity constant of 7.86 nM as determined in SPR assay (Biacore T200).

**BLI Data**

Assay Data



Loaded Biotinylated Human B7-H7, His-Avi Tag on Streptavidin-Biosensor can bind Human CD28H, hFc Tag with an affinity constant of 5.28 nM as determined in BLI assay .