

# Human/Cynomolgus/Rhesus macaque CD28 Protein

Cat. No. CD8-HM128

## Description

<b>Source</b>	Recombinant Human/Cynomolgus/Rhesus macaque CD28 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Asn19-Pro152.
<b>Accession</b>	P10747-1
<b>Molecular Weight</b>	The protein has a predicted MW of 16.75 kDa. Due to glycosylation, the protein migrates to 40-65 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

## Formulation and Storage

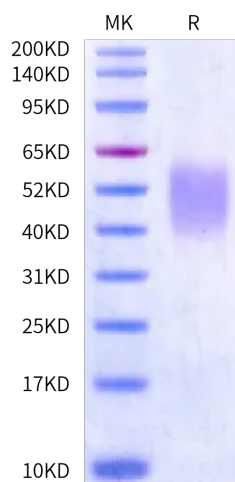
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage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

CD28 is the receptor for CD80 (B7-1) and CD86 (B7-2) proteins. When activated by Toll-like receptor ligands, the CD80 expression is upregulated in antigen presenting cells (APCs). The CD86 expression on antigen presenting cells is constitutive. CD28 is the only B7 receptor constitutively expressed on naive T cells.

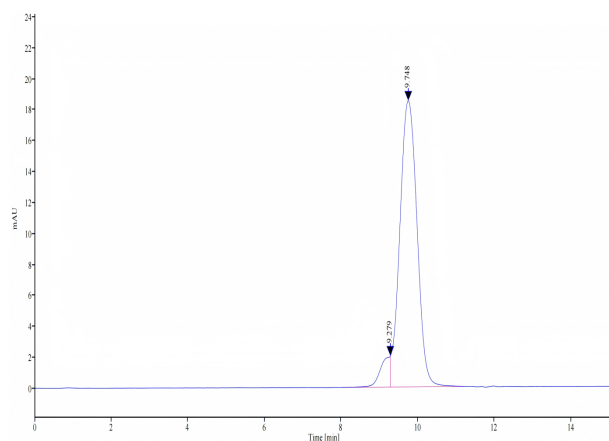
## Assay Data

### Bis-Tris PAGE



Human/Cynomolgus/Rhesus macaque CD28 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



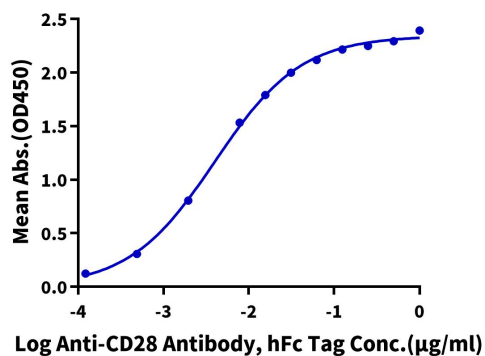
The purity of Human/Cynomolgus/Rhesus macaque CD28 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

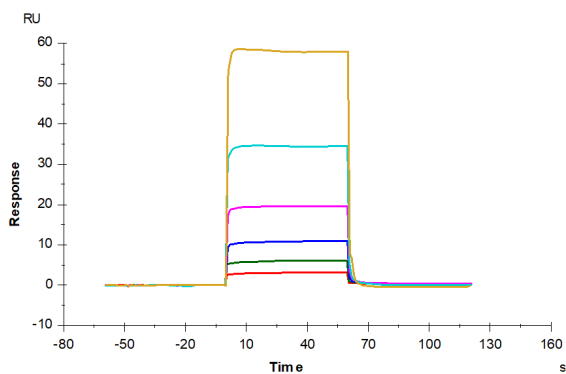
Human/Cynomolgus/Rhesus macaque CD28, His Tag ELISA

0.2µg Human/Cynomolgus/Rhesus macaque CD28, His Tag Per Well



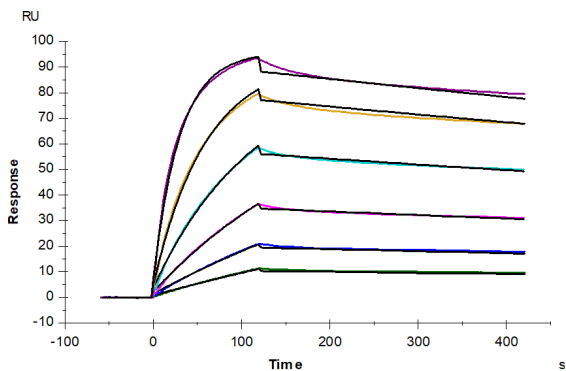
Immobilized Human/Cynomolgus/Rhesus macaque CD28, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD28 Antibody, hFc Tag with the EC50 of 4.0ng/ml determined by ELISA.

SPR Data



Human B7-1, hFc Tag (Cat. B71-HM280) captured on CM5 Chip via Protein A can bind Human/Cynomolgus/Rhesus macaque CD28, His Tag with an affinity constant of 8.77 µM as determined in SPR assay (Biacore S200).

SPR Data



Anti-CD28 Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human/Cynomolgus/Rhesus macaque CD28, His Tag with an affinity constant of 1.30 nM as determined in SPR assay (Biacore S200).