

Human/Cynomolgus/Rhesus macaque CD28 Protein

Cat. No. CD8-HM428

Description

Source	Recombinant Human/Cynomolgus/Rhesus macaque CD28 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Asn19-Pro152.
Accession	P10747-1
Molecular Weight	The protein has a predicted MW of 18.2 kDa. Due to glycosylation, the protein migrates to 36-52 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

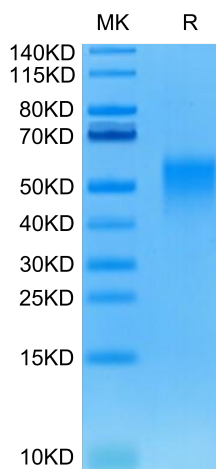
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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

Tris-Bis PAGE

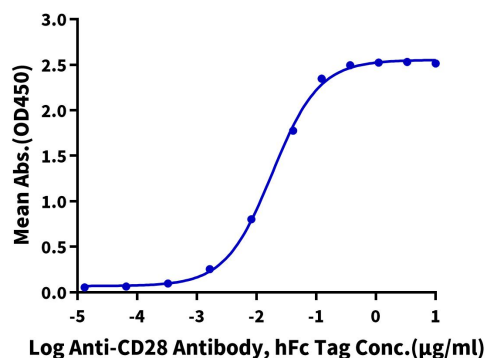


Human/Cynomolgus/Rhesus macaque CD28 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Human/Cynomolgus/Rhesus macaque CD28, His Tag ELISA

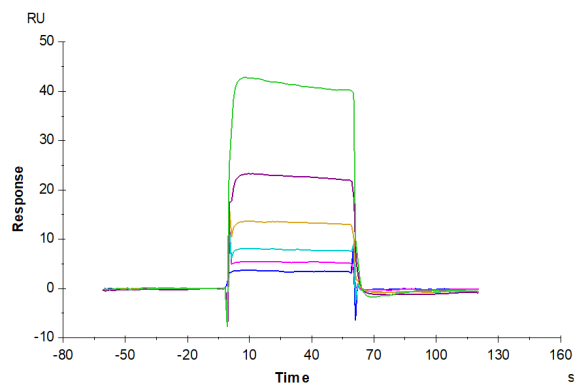
0.05µg Human/Cynomolgus/Rhesus macaque CD28, His Tag Per Well



Immobilized Human/Cynomolgus/Rhesus macaque CD28, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CD28 Antibody, hFc Tag with the EC50 of 18.4ng/ml determined by ELISA (QC Test).

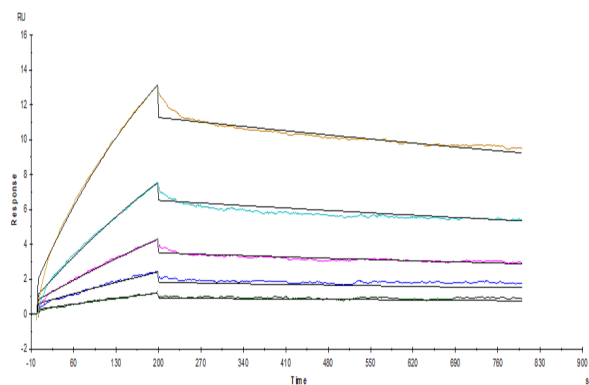
Assay Data

SPR Data



Human B7-1, hFc Tag captured on CM5 Chip via Protein A can bind Human/Cynomolgus/Rhesus macaque CD28, His-Avi Tag with an affinity constant of 43.61 μ M as determined in SPR assay (Biacore T200).

SPR Data



Anti-CD28 antibody captured on Protein A chip, can bind Human/Cynomolgus/Rhesus macaque CD28, His Tag with an affinity constant of 5.15nM as determined in a SPR assay (Biacore T200).