

# Recombinant Human/Cynomolgus/Rhesus macaque CD28 Protein

Catalog No.: RP00575 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot Human/Cyno 940 P10747-1

molgus/Rhes us-macaque

## Tags

N-His&Avi

#### **Synonyms**

CD28 antigen (Tp44); CD28 antigen; CD28 molecule; CD28; MGC138290; Tcell-specific surface glycoprotein CD28; Tp44

## **Product Information**

**Source** Purification HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

18.2 kDa 36-52 kDa

## **Endotoxin**

< 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

# Contact

8	400-999-6126
$\times$	cn.market@abclonal.com.cn

# **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.

#### **Basic Information**

# **Description**

Recombinant Human/Cynomolgus/Rhesus macaque CD28 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asn19-Pro152) of Human/Cynomolgus/Rhesus-macaque CD28 (Accession #P10747-1) fused with a N-His&Avi tag at the N-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.

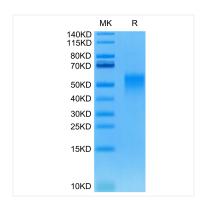
After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

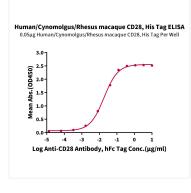
## **Operational Notes**

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

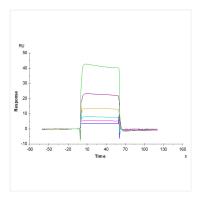
## **Validation Data**



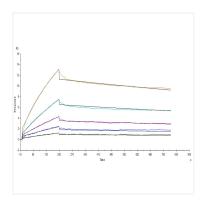
Recombinant Human/Cynomolgus/Rhesus macaque CD28 Protein was determined by Tris-Bis PAGE under reducing conditions.



Immobilized Human/Cynomolgus/Rhesus macaque CD28, His Tag at 0.5  $\mu$ g/mL (100  $\mu$ L/Well) on the plate. Dose response curve for Anti-CD28 Antibody, hFc Tag with the EC<sub>50</sub> of 18.4ng/mL determined by ELISA (QC Test).



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  $\mu$ M as determined in SPR assay (Biacore T200).



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).