



## Synonym

CD28,Tp44

#### Source

Mouse CD28, His Tag(CD8-M52H6) is expressed from human 293 cells (HEK293). It contains AA Asn 20 - Lys 149 (Accession # <u>P31041-1</u>). Predicted N-terminus: Asn 20

#### **Molecular Characterization**

CD28(Asn 20 - Lys 149) P31041-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 16.9 kDa. The protein migrates as 30-38 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

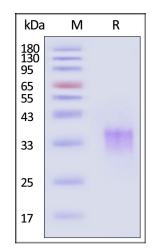
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

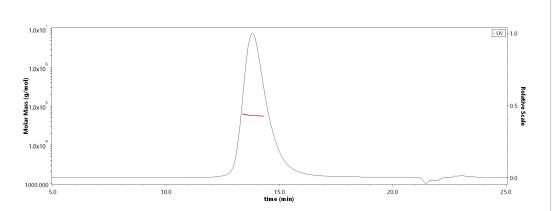
### **SDS-PAGE**



Mouse CD28, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%(With Star Ribbon Pre-stained Protein Marker).

## **Bioactivity-ELISA**

### **SEC-MALS**



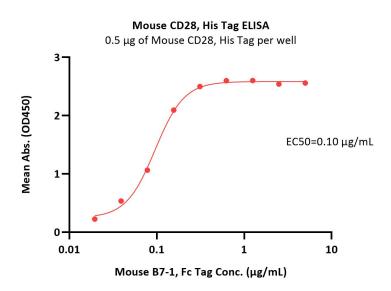
The purity of Mouse CD28, His Tag (Cat. No. CD8-M52H6) is more than 90% and the molecular weight of this protein is around 53-63 kDa verified by SEC-MALS.

<u>Report</u>

# Mouse CD28 Protein, His Tag, active dimer (MALS verified)

Catalog # CD8-M52H6





Immobilized Mouse CD28, His Tag (Cat. No. CD8-M52H6) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Mouse B7-1, Fc Tag (Cat. No. CD0-M5259) with a linear range of 0.02-0.156  $\mu$ g/mL (QC tested).

# Background

T-cell-specific surface glycoprotein CD28 is also known as TP44, is a single-pass type I membrane protein which contains one Ig-like V-type (immunoglobulin-like) domain. is one of the molecules expressed on T cells that provide co-stimulatory signals, which are required for T cell activation. CD28 is the receptor for CD80 (B7.1) and CD86 (B7.2). 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.

