Catalog # CD8-M120b



#### Source

Monoclonal Anti-Human CD28 Antibody, premium grade (CD8-M120b) is recombinantly produced from human 293 cells (HEK293). *Monoclonal Anti-Human CD28 Antibody, premium grade (CD8-M120b), designed for preclinical stage, has the same activity and performance with GMP Monoclonal Anti-Human CD28 Antibody (GMP-MC2824), which enables a seamless transition from preclinical development to clinical phases. Premium Grade product offer a cost efficient alternative of GMP Grade products for the early development phase when safety of raw materials is not top priority. By using Premium Grade products in early development phase, you can transition easily into clinical and commercial phase without need to revalidate the raw materials and modify manufacturing process.* 

#### Isotype

Mouse IgG1/kappa

### Specificity

The cross-reactivity with other species has not been tested yet.

## Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### Endotoxin

Less than 0.002 EU per  $\mu$ g by the LAL method.

## Protein A

<5 ppm of protein tested by ELISA.

## **Host Cell Protein**

<0.5 ng/µg of protein tested by ELISA.

## Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

# Sterility

The sterility testing was performed by membrane filtration method.

#### Formulation

Supplied as 0.2  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

#### Storage

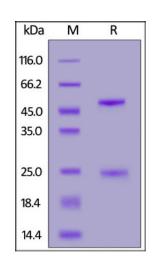
For long term storage, the product should be stored at liquid state at -70°C.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

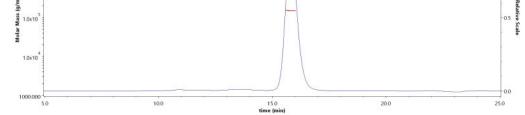
- 2-8°C for 12 months under sterile condition;
- -70°C for 24 months.

## **SDS-PAGE**



## **SEC-MALS**









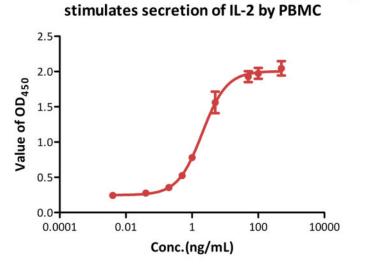
### Monoclonal Anti-Human CD28 Antibody, premium grade



## Catalog # CD8-M120b

Monoclonal Anti-Human CD28 Antibody, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

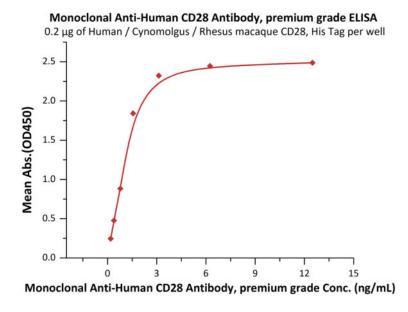
## **Bioactivity-Bioactivity CELL BASE**



Monoclonal Anti-Human CD28 Antibody, premium grade

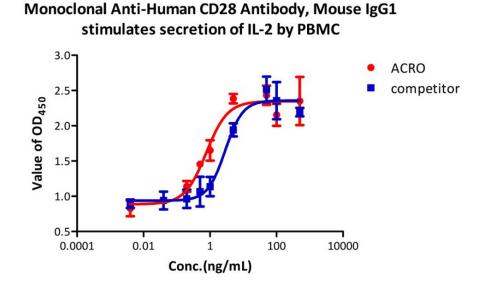
Monoclonal Anti-Human CD28 Antibody, premium grade (Cat. No. CD8-M120b) stimulates secretion of IL-2 by PBMC stimulated with 4 ng/mL Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (Cat. No. CDE-M120a). The typically EC50 for this effect is 2.03 ng/mL (QC tested).

## **Bioactivity-Elisa**



Immobilized Human / Cynomolgus / Rhesus macaque CD28, His Tag (Cat. No. CD8-H52Hc) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human CD28 Antibody, premium grade (Cat. No. CD8-M120b) with a linear range of 0.098-1.563 ng/mL (QC tested).

The purity of Monoclonal Anti-Human CD28 Antibody, premium grade (Cat. No. CD8-M120b) is more than 95% and the molecular weight of this protein is around 140-160 kDa verified by SEC-MALS. <u>Report</u>



The cell activity of Monoclonal Anti-Human CD28 Antibody, premium grade (Cat. No. CD8-M120b) is 3.7 times better than competitor.

#### 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









## Catalog # CD8-M120b

(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.

## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.



>>> www.acrobiosystems.com

