

Monoclonal Anti-Human CD28 Antibody

humanized IgG4 (HPLC verified)

- **Ultra-low endotoxin**
- **Ultra-high purity**
- **Ultra-high bioactivity**

Catalog# / Size	AC67563/500ug
Clone	TGN1412
Isotype	Humanized IgG4
Endotoxin	Less than 0.001 EU per µg determined by LAL gel clotting assay.
Purity	>99% as determined by SDS-PAGE >99% as determined by SEC-HPLC
Antibody Type	Monoclonal
Expressed Host	Stable CHO cell line
Application	T-cell activation

Product Details

Reactivity	Human
Concentration	1.0 mg/mL
Form	Liquid
Antibody Type	Monoclonal
Formulation	Supplied as 0.2 µm filtered solution in PBS, pH7.4.
Storage instructions	Shipped at 4°C. Stored at 4°C for 12 months.
Other Names	TP44, Tp44

Description

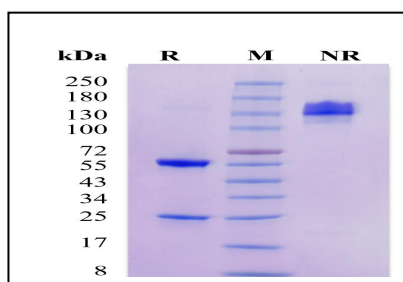
T-cell-specific surface glycoprotein CD28 is a 44kD disulfide-linked homodimeric type I glycoprotein. It is a member of the immunoglobulin superfamily and is also known as T44 or Tp44. CD28 is expressed on most T lineage cells, NK cell subsets, and plasma cells. The binding of CD28 to its ligands CD80 and CD86 transfers a costimulatory signal to the T cell. Activation and proliferation of T cells can be induced by interaction of the T cell receptor (TCR) with peptide-MHC complexes expressed on the surface of antigen presenting cells (APC). T cell activation can also be achieved by agonistic stimulation with the CD3 antibody binding to the TCR complex and can be enhanced by costimulation with CD28 antibody.



Application References

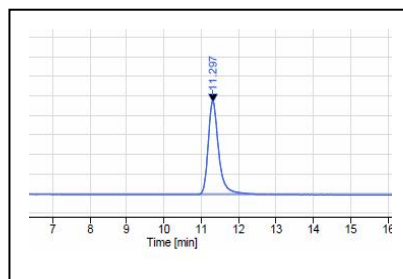
- 1、 Magatti M, et al. 2008. Stem Cells 26:182.
- 2、 Calea-Lauri J, et al. 1999. J. Immunol. 163:62.
- 3、 Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
- 4、 Nunes J, et al. 1993. Biochem. J. 293:835.

Product Data



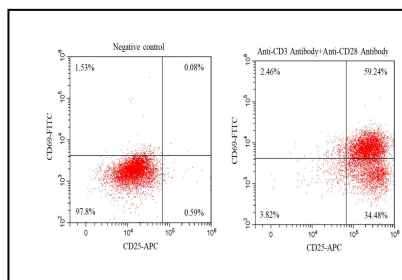
SDS-PAGE

Monoclonal anti-human CD28 antibody on SDS-PAGE under reducing (R) and non-reducing(NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 99%.



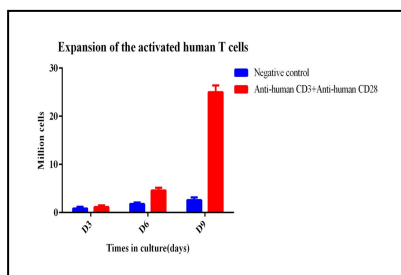
SEC-HPLC

The purity of monoclonal anti-human CD28 antibody was greater than 99% as determined by SEC-HPLC.



Bioactivity-FACS

The purified human T cells were activated using monoclonal anti-human CD3 antibody and monoclonal anti-human CD28 antibody. Cells were fluorescently stained using APC labeled anti-human CD25 antibody and labeled FITC anti-human CD69 antibody and analyzed by flow cytometry.



Bioactivity-Cell based assay

PBMC derived T cells were activated in the monoclonal anti-human CD3 antibody and anti-human CD28 antibody for a period of 3 days. Activation was done by coated with monoclonal anti-human CD3 antibody, with 1 μ g/mL of each antibody. Cells were cultured for a total of 9 days, and viable cell number was determined.