

**Anti-CD28 Reference Antibody (Theralizumab)
Recombinant Antibody
Catalog # APR10315**

Specification

Anti-CD28 Reference Antibody (Theralizumab) - Product Information

Application	FC, E, FTA
Primary Accession	P10747
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4
Calculated MW	146.22 KDa

Anti-CD28 Reference Antibody (Theralizumab) - Additional Information

Target/Specificity
CD28

Endotoxin
< 0.001EU/ µg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-CD28 Reference Antibody (Theralizumab) - Protein Information

Name CD28

Function
Receptor that plays a role in T-cell activation, proliferation, survival and the maintenance of immune homeostasis (PubMed:[1650475](http://www.uniprot.org/citations/1650475)), PubMed:[7568038](http://www.uniprot.org/citations/7568038)). Functions not only as an amplifier of TCR signals but delivers unique signals that control intracellular biochemical events that alter the gene expression program of T-cells (PubMed:[24665965](http://www.uniprot.org/citations/24665965)). Stimulation upon engagement of its cognate ligands CD80 or CD86 increases proliferation and expression of various cytokines in particular IL2 production in both CD4(+) and CD8(+) T-cell subsets (PubMed:[1650475](http://www.uniprot.org/citations/1650475), PubMed:[35397202](http://www.uniprot.org/citations/35397202)). Mechanistically, ligation induces recruitment of protein kinase C-theta/PRKCQ and GRB2 leading to

NF-kappa-B activation via both PI3K/Akt-dependent and -independent pathways (PubMed:21964608, PubMed:24665965, PubMed:7568038). In conjunction with TCR/CD3 ligation and CD40L costimulation, enhances the production of IL4 and IL10 in T-cells (PubMed:8617933).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

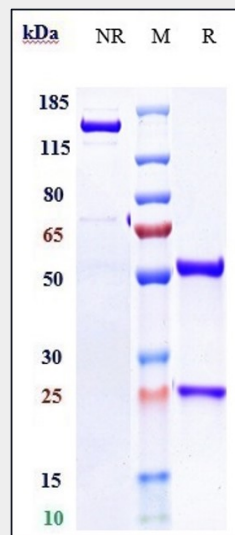
Expressed in T-cells and plasma cells, but not in less mature B-cells

Anti-CD28 Reference Antibody (Theralizumab) - Protocols

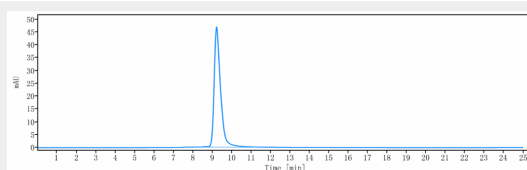
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD28 Reference Antibody (Theralizumab) - Images



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



The purity of Anti-CD28 Reference Antibody (Theralizumab) is more than 98.72% ,determined by SEC-HPLC.