

## **Anti-CD28 Reference Antibody (FR104)**

Recombinant Antibody Catalog # APR10493

### **Specification**

## Anti-CD28 Reference Antibody (FR104) - Product Information

Application FC, Kinetics, Animal Model Primary Accession P10747
Reactivity Human
Clonality Monoclonal Isotype IgG2SA
Calculated MW 145 KDa

### Anti-CD28 Reference Antibody (FR104) - 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 (FR104) - Protein Information

#### Name CD28

#### **Function**

Receptor that plays a role in T-cell activation, proliferation, survival and the maintenance of immune homeostasis (PubMed:<a href="http://www.uniprot.org/citations/1650475" target="\_blank">1650475</a>, PubMed:<a href="http://www.uniprot.org/citations/7568038" target="\_blank">7568038</a>). 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:<a href="http://www.uniprot.org/citations/24665965" target="\_blank">24665965" target="\_blank">24665965</a>). 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:<a href="http://www.uniprot.org/citations/1650475" target="\_blank">1650475</a>, PubMed:<a href="http://www.uniprot.org/citations/1650475" target="\_blank">1650475</a>, PubMed:<a

 $href="http://www.uniprot.org/citations/1650475" target="\_blank">1650475</a>, PubMed:<a href="http://www.uniprot.org/citations/35397202" target="\_blank">35397202</a>). Mechanistically, ligation induces recruitment of protein kinase C-theta/PRKCQ and GRB2 leading to$ 



NF-kappa-B activation via both PI3K/Akt-dependent and -independent pathways (PubMed:<a href="http://www.uniprot.org/citations/21964608" target="\_blank">21964608</a>, PubMed:<a href="http://www.uniprot.org/citations/24665965" target="\_blank">24665965</a>, PubMed:<a href="http://www.uniprot.org/citations/7568038" target="\_blank">7568038</a>). In conjunction with TCR/CD3 ligation and CD40L costimulation, enhances the production of IL4 and IL10 in T-cells (PubMed:<a href="http://www.uniprot.org/citations/8617933" target=" blank">8617933</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

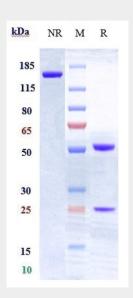
Expressed in T-cells and plasma cells, but not in less mature B-cells

### Anti-CD28 Reference Antibody (FR104) - Protocols

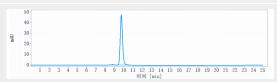
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

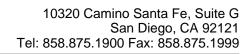
## Anti-CD28 Reference Antibody (FR104) - Images



Anti-CD28 Reference Antibody (FR104) 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 (FR104)is more than 98.98%, determined by





SEC-HPLC.