

**CD28 FITC Monoclonal Antibody (Clone CD28.2)**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV11473****Specification**

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**CD28 FITC Monoclonal Antibody (Clone CD28.2) - Product Information**

Application	FC
Primary Accession	<a href="#">P10747</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1, Kappa
Calculated MW	25066

**CD28 FITC Monoclonal Antibody (Clone CD28.2) - Additional Information****Gene ID 940**

Positive Control	<b>FACS: Human peripheral blood lymphocytes</b>
Application & Usage	<b>Flow (Cell Surface): 5 µl/1x10<sup>6</sup> cells, Volume per test: 5 µl (0.5 µg).</b>

**Other Names**  
CD28**Target/Specificity**  
CD28**Antibody Form**  
Liquid**Appearance**  
Colorless liquid**Formulation**  
Phosphate-buffered aqueous solution pH 7.2, ≤0.09% Sodium azide, may contain carrier protein/stabilizer.**Handling**  
The antibody solution should be gently mixed before use.**Reconstitution & Storage**  
4°C**Background Descriptions****Precautions**  
CD28 FITC Monoclonal Antibody (Clone CD28.2) is for research use only and not for use in diagnostic or therapeutic procedures.

## **CD28 FITC Monoclonal Antibody (Clone CD28.2) - Protein Information**

**Name** CD28

### **Function**

Involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival. Enhances the production of IL4 and IL10 in T-cells in conjunction with TCR/CD3 ligation and CD40L costimulation (PubMed:<a href="http://www.uniprot.org/citations/8617933" target="\_blank">8617933</a>). Isoform 3 enhances CD40L-mediated activation of NF-kappa-B and kinases MAPK8 and PAK2 in T-cells (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>).

### **Cellular Location**

Membrane; Single-pass type I membrane protein.

### **Tissue Location**

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

## **CD28 FITC Monoclonal Antibody (Clone CD28.2) - 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](#)

## **CD28 FITC Monoclonal Antibody (Clone CD28.2) - Images**

## **CD28 FITC Monoclonal Antibody (Clone CD28.2) - Background**

CD28 (Cluster of Differentiation 28) 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. The CD28.2 monoclonal antibody specifically binds with the human 44 kDa homodimeric trans-membrane glycoprotein CD28, expressed on the surface of most mature T lymphocytes, plasma cells, and thymocytes. CD28 is a ligand for B7-1 (CD80) and B7-2 (CD86), a co-stimulator of T lymphocytes, and enhances the interaction between T and B lymphocytes. It has been reported that the T lymphocytes stimulation to produce IL-2 depends on the monoclonal antibody involved, which suggests that the CD28 molecule presents some sub regions with distinct functions. The CD28.2 antibody induces Ca<sup>2+</sup> influx in Jurkat T lymphocytes. Other studies have shown that CD28 is involved in the signal transduction.