

10-4137-F: Monoclonal Antibody to CD28 (Clone: CB28)

Clonality :	Monoclonal
Clone Name :	CB28
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	CD28
Gene ID :	940
Uniprot ID :	P10747
Format :	Purified
Alternative Name :	T-cell-specific surface glycoprotein CD28, TP44, CD28
Isotype :	Mouse IgG1, Kappa
Immunogen Information :	A partial length recombinant protein from CD28 was used as the immunogen for this antibody.

Description

CD28 is a type I transmembrane protein that binds through its extracellular region to B7 proteins (CD80 and CD86), which are transmembrane proteins expressed on the surface of APCs (Antigen-Presenting Cells) and are up-regulated by inflammatory signals. CD28 mediates signals that promote T lymphocyte differentiation and proliferation, and enhance antibody production of B lymphocytes. Deficiencies in CD28 pathways result in complete T lymphocyte tolerance in vitro and in vivo. Both CD4+ and CD8+ memory T cells need CD28 costimulation to achieve maximal expansion and pathogen clearance. The blockade of the CD28-B7 interaction has been used to down-regulate the activation of the immune system in autoimmune diseases. Based on the expression of the costimulatory molecule CD28 on the surface of CD8+ T cells, two different lymphocyte subgroups have been designated: antigen-primed cytotoxic T cells (CD8+CD28+ T cells) and suppressor T cells (CD8+CD28- T cells). The frequency of CD28+CD8+ T cells and especially the balance between CD8+CD28+ and CD8+CD28- T cells are important in many diseases, including CHB (Chronic Hepatitis B).

Product Info

Amount :	100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 125 µl/100 µg in 500 µl Tris and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C, stable for 6 months.

Application Note

FACS: 0.2-0.5 µg/10⁶ cells

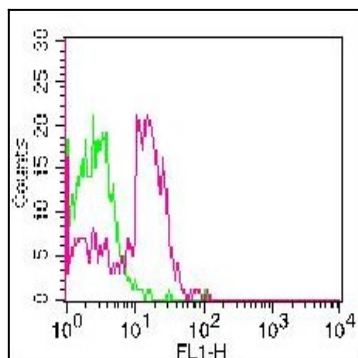


Fig-1: Cell surface Flow analysis of CD28 in PBMC (lymphocytes gated) using 0.2 μ g/10⁶ cells. Green represents FITC conjugated isotype control (ABEOMICS); red represents FITC conjugated anti-hCD28 antibody (10-4137-F).