

Human CD28 Antibody-Human IgG2



Catalog Number: 11524-H001

General Information	
Clone ID	H001
Ig Type	Human IgG2
Production	Human cell
Applications	Agonist Activity, FCM
Formulation	0.2 µm filtered solution in Histidine and Arginine buffer containing 120mM NaCl, 0.02% Tween 80, pH6.0
Storage	< -20°C

Specificity

Human CD28

Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

Background

T-cell-specific surface glycoprotein CD28, also known as TP44 and CD28, is a single-pass type I membrane protein which contains one Ig-like V-type (immunoglobulin-like) domain. CD28 / TP44 is a disulphide-bonded glycoprotein belonging to the immunoglobulin (Ig) superfamily, and structurally consists of a single Ig V-like extracellular domain, a transmembrane domain and an intracellular domain. CD28 / TP44 is expressed in T-cells and plasma cells, but not in less mature B-cells. CD28 / TP44 is involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival. CD28 / TP44 can binds the B7-1 and B7-2 ligand, and together perform important functions in the T and B cell response pathways. CD28 / TP44 is thus involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival.

Reference

Linsley PS. et al., 1993, Annu Rev Immunol. 11 :191-212.
Edmead CE. et al., 1997, Int J Biochem Cell Biol. 29 (8-9):1053-7.
Woerly G. et al., 2002, J Leukoc Biol. 72 (4): 769-79.

Character	Method	Result
Specificity	ELISA	Human CD28 (Cat:11524-H08H)
Antibody concentration	UV	> 1 mg/mL
Aggregation	SEC-HPLC	< 5% aggregation
Purity	SDS-PAGE	> 95%
Endotoxin	LAL gel clotting	< 0.50 EU/mg
Residual protein A	ELISA	< 1000 ppm
Mycoplasma detection	qPCR	Negative
Host cell protein	ELISA	< 1000 ppm

Human CD28 Antibody-Human IgG2

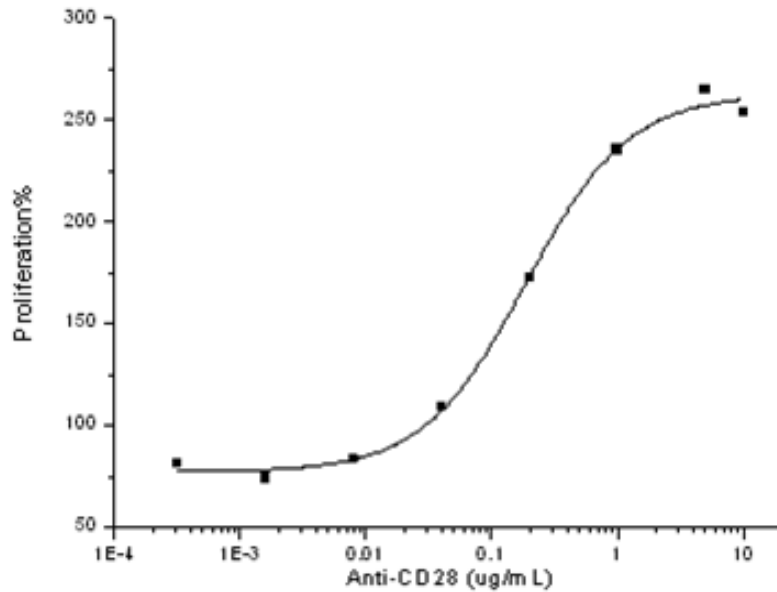


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Applications

Agonist Activity – Measured by its ability to induce proliferation of human T cells. The ED50 for this effect is typically 0.2-1 ug/mL.



Human CD28 Antibody-Human IgG2

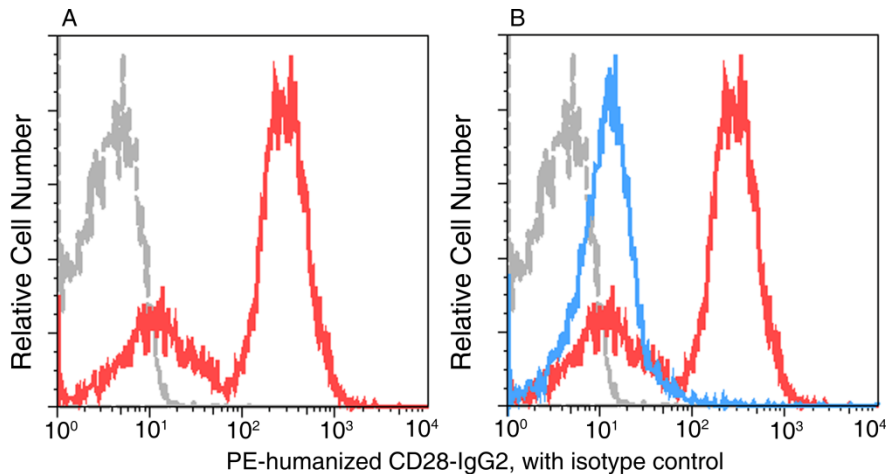


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Applications

Flow Cytometry



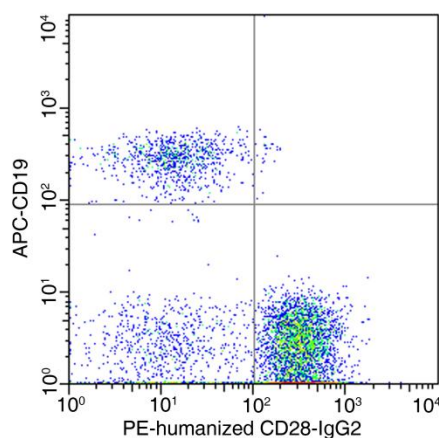
The staining effect of Human CD28 antibody to CD28 of Human Peripheral Blood Lymphocytes by Flow cytometric analysis.

A: Lymphocytes were stained with PE-conjugated humanized CD28 antibody.

B: The binding effect of PE-conjugated human CD28 antibody (Red histograms) in the lymphocytes can be blocked by pre-incubation of the CD28 antibody (BD, 555725) for 20min (blue histograms).

Flow cytometry was performed on a BD FACSCalibur flow cytometry system.

Please refer to www.sinobiological.com/Flow-Cytometry-FACS-Protocols-a-750.html for technical protocols.



CD28+ T cell staining of lymphocytes using human CD28 antibody by Flow cytometric analysis.

Lymphocytes were stained with PE-conjugated humanized CD28 antibody and CD19-APC (BD, 555415).

Flow cytometry was performed on a BD FACSCalibur flow cytometry system.

Please refer to www.sinobiological.com/Flow-Cytometry-FACS-Protocols-a-750.html for technical protocols.

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