

CD28 (pY218) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51639

Product Information

Application WB Primary Accession P10747

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW25066

Additional Information

Gene ID 940

Other Names T-cell-specific surface glycoprotein CD28, TP44, CD28, CD28

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name CD28

Function Receptor that plays a role in T-cell activation, proliferation, survival and the

maintenance of immune homeostasis (PubMed:1650475, PubMed: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). 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, PubMed: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

Background

Involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival.

References

Aruffo A., et al. Proc. Natl. Acad. Sci. U.S.A. 84:8573-8577(1987). Lee K.P., et al.J. Immunol. 145:344-352(1990). Deshpande M., et al. Hum. Immunol. 63:20-23(2002). Hanawa H., et al. Blood 99:2138-2145(2002). Gan S.U., et al. Submitted (NOV-2002) to the EMBL/GenBank/DDBJ databases.

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