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Product datasheet for SM1087P

CD28 Rat Monoclonal Antibody [Clone ID: YTH913.12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	YTH913.12
Applications:	FC, IHC
Recommended Dilution:	Flow Cytometry: Use 10 µl of 1/25-1/50 diluted antibody to label 10e6 cells or 100 µl whole blood). Immunohistochemistry on Frozen Sections.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Human peripheral blood T-cells.
Specificity:	This antibody recognises the human CD28 cell surface antigen, a 44kD glycoprotein expressed by a subset of T lymphocytes. The antibody enhances the MLR response. It has been reported that this clone also recognises an epitope of CD28 expressed by NK cells, which is not recognised by clones of 9.3 or CD28.2.(2)
Formulation:	PBS, pH 7.4, with 0.09 % Sodium Azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Affinity chromatography on Protein A.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Should this product contain a precipitate we recommend microcentrifugation before use.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD28 molecule

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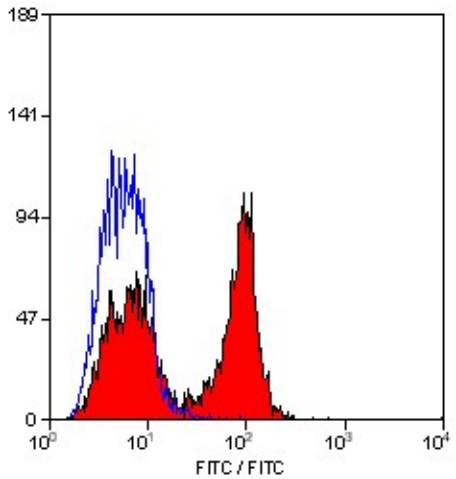
Database Link: Entrez Gene 940 Human
P10747

Background: Human CD28 antigen is a 44 kDa disulfide linked homodimeric T cell specific surface glycoprotein. It is a cell adhesion molecule of the immunoglobulin superfamily which is constitutively expressed on most peripheral blood T lymphocytes (approximately 95% of CD4+ cells and 50% of CD8+ cells). Mature thymocytes exhibit higher levels of CD28 than the immature cells. Activation of T cells results in enhanced CD28 expression. T cell activation requires two combined signals provided by antigen presenting cells. The first is mediated via the T cell receptor following its interaction with antigenic peptide MHC complexes, and the second is delivered by accessory or costimulating molecules through their counter receptors on T lymphocytes. CD28 bears structural homology to CTLA 4 which is expressed at very low levels on the surface of CD4+ and CD8+ peripheral blood cells only following activation. CD28 is the natural receptor for the B7/BB 1 ligand (CD80) a 55-60 kDa glycoprotein which is expressed on activated B lymphocytes, on dendritic cells and on interferon gamma treated monocytes. The binding of B7 1/BB 1 molecules to CD28 is involved in T lymphocyte activation and in the initiation and maintenance of chronic inflammation.

Synonyms: TP44

Product images:



Staining of human peripheral blood lymphocytes using Rat anti Human CD28 antibody.