

Product datasheet for **SM1087LE**

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

Product data:

Product Type:	Primary Antibodies
Clone Name:	YTH913.12
Applications:	FC, FN, IHC
Recommended Dilution:	Flow Cytometry: 1/50 - 1/100; Use 10ml of the suggested working dilution to label 10e6 cells in 100µl. Immunohistochemistry on frozen sections. Functional Assays: Stimulation of MLR response.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Human peripheral blood T-cells. Spleen cells from an immunised DA rat were fused with cells of the Y3/Ag 1.2.3 rat myeloma cell line.
Specificity:	This antibody recognises the CD28 cell surface antigen, a 44kD glycoprotein expressed by 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.
Formulation:	PBS, pH7.4 State: Low Endotoxin State: Liquid purified IgG
Concentration:	lot specific
Purification:	Affinity chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD28 molecule



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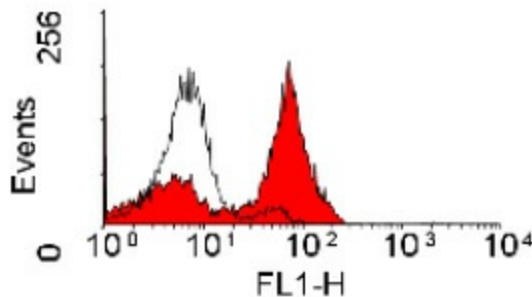
Database Link: [Entrez Gene 940 Human P10747](#)

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

Note: Endotoxin Level: less than 0.01 EU/μg

Product images:



Staining of human peripheral blood lymphocytes with RAT ANTI HUMAN CD28