

Product datasheet for **SM1087R**

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

Product data:

Product Type:	Primary Antibodies
Clone Name:	YTH913.12
Applications:	FC
Recommended Dilution:	Flow Cytometry.
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 human CD28 cell surface antigen, a 44kD glycoprotein expressed by a subset of T lymphocytes. 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, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: PE State: Lyophilized purified IgG fraction. Label: R. Phycoerythrin (RPE)
Reconstitution Method:	Restore with distilled water
Purification:	Affinity chromatography on Protein G.
Conjugation:	PE
Storage:	Prior to and following reconstitution store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD28 molecule
Database Link:	Entrez Gene 940 Human P10747



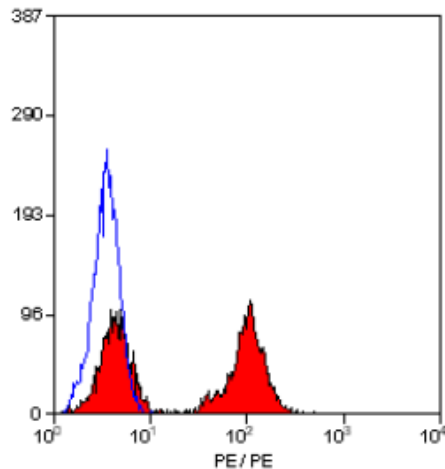
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Background:

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 with RAT ANTI HUMAN CD28:RPE (SM1087R).