

## Product datasheet for **SM2266R**

### Cd28 Mouse Monoclonal Antibody [Clone ID: E18]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	E18
Applications:	FC
Recommended Dilution:	Flow Cytometry: Use 10 µl of Neat-1/10 diluted antibody to label 10e6 cells in 100 µl.
Reactivity:	Mouse
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Alternate immunisation with A20 cells expressing mCD28 and recombinant mCD28lg. Spleen cells from immunised CD28-/-knockout mice were fused with cells of the X63Ag8.653 myeloma cell line.
Specificity:	This antibody recognises murine CD28, a co-stimulatory cell surface molecule expressed by T cell subsets. Clone E18 has been shown to be able to stimulate murine T lymphocytes in combination with anti-mouse CD3.
Formulation:	Phosphate buffered saline pH 7.4 without preservatives. Label: PE State: Lyophilized purified IgG fraction. Label: R. Phycoerythrin (RPE)
Reconstitution Method:	Restore with 1 ml distilled water.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G.
Conjugation:	PE
Storage:	Store the antibody undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Stability:	Shelf life: one year from despatch.



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**Gene Name:** CD28 antigen

**Database Link:** [Entrez Gene 12487 Mouse P31041](#)

**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