

Product datasheet for **SM023P**

Cd28 Hamster Monoclonal Antibody [Clone ID: 37.51.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	37.51.1
Applications:	FC, IHC
Recommended Dilution:	Flow cytometry (use 5 µl of neat antibody to label 10e6 cells in 100 µl). Immunoprecipitation.
Reactivity:	Mouse
Host:	Hamster
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Mouse T lymphoma EL-4 cells
Specificity:	This antibody reacts with mouse CD28 found predominantly on T cell subsets and activated B cells.
Formulation:	PBS containing 0.09% Sodium Azide State: Purified State: Liquid purified IgG
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.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD28 antigen
Database Link:	Entrez Gene 12487 Mouse P31041



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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