

Product datasheet for **SM253B**

Cd3d Mouse Monoclonal Antibody [Clone ID: 1F4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1F4
Applications:	FC
Recommended Dilution:	Flow Cytometry: Use 10 µl of Neat-1/10 diluted antibody to label 10 ⁶ cells in 100 µl.
Reactivity:	Rat
Host:	Mouse
Isotype:	IgM
Clonality:	Monoclonal
Immunogen:	F344 Rat T cells stimulated with PMA (TPA) and calcium ionophore. Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3-X63-Ag8.653 myeloma cell line.
Specificity:	This antibody recognises CD3, a 25kD antigen which is found on rat T-cells. This antibody does not react with Rat B cells. Functionally the addition of the antibody to a culture of Rat T cells induces the proliferation of T-cells in the presence of PMA (See Nicolls, M.G. et al. for details). We recommend the use of SM253A for this purpose.
Formulation:	PBS, pH 7.4 Label: Biotin State: Liquid purified Ig fraction Stabilizer: 1% BSA Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Biotin
Storage:	Store 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:	CD3d molecule



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Database Link: [Entrez Gene 25710 Rat P19377](#)

Background: T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits: CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR induced growth arrest, cell survival and proliferation. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases.

Synonyms: CD3D, T3D