

Monoclonal Antibody to CD3 - FITC

Alternate names: T-cell surface antigen T3/Leu-4, T-cell surface glycoprotein CD3, T3/Leu-4

Catalog No.: SM1839F Quantity: 100 Tests

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.

 Uniprot ID:
 Q95LI5

 NCBI:
 9541

Host / Isotype: Mouse / IgG1

Clone: FN-18

Immunogen: Rhesus monkey peripheral blood leucocytes. Spleen cells from immunised mice were

fused with cells of the mouse SP2/0 Ag14 myeloma cell line.

Format: State: Lyophilized purified IgG

Purification: Affinity chromatography on Protein A

Buffer System: PBS

The addition of 0.1% sodium azide and 1% Bovine Serum Albumin is recommended for long

term storage.

Label: FITC – Fluorescein Isothiocyanate Isomer 1 **Reconstitution:** Restore with 0.5 ml distilled water.

Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. We recommend that the vial is gently mixed after reconstitution.

Applications: Flow cytometry: 1/10; Use 50µl of the suggested working dilution to label 10e6 cells in

100µl.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.



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Specificity: This antibody recognises the RhT3 antigen, the homologue of human CD3. Clone FN18 has

been reported to recognise a polymorphic epitope of the RhT3 antigen, which is expressed

by mature T lymphocytes.

Species: Rhesus Monkey, Macaque monkey.

Other species not tested.

Storage: Prior to reconstitution store at 2-8°C.

Following reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

This product is photosensitive and should be protected from ligh

Shelf life: one year from despatch.

General References: 1. Nooji, F.J.M. et al. (1986) Polymorphism for RhT3, a CD3-like cell surface antigen,

expressed on rhesus monkey T lymphocytes. Immunology 59: 611.

2. Nooij, F. J. et al. (1986) Differentiation antigens on rhesus monkey lymphocytes II characterisation of RhT3, a CD3-like antigen on T cells. Eur. J. Immunol. 16: 981-4.