

Product Data Sheet

FITC anti-rat CD3

Catalog # / Size: 201403 / 100 µg

Clone: 1F4

Isotype: Mouse IgM, κ

Immunogen: F344 rat spleen cells stimulated with PMA and calcium ionophore

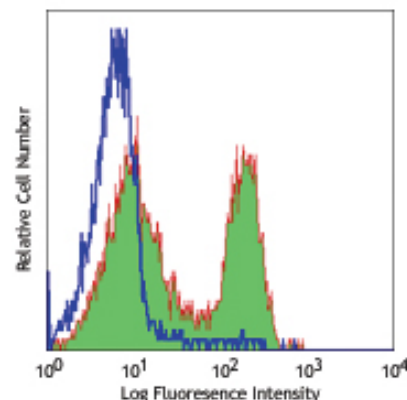
Reactivity: Rat

Preparation: The antibody was conjugated with FITC under optimal conditions, and is at >85% purity. The solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



LOU rat splenocytes stained with 1F4 FITC

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Immobilized 1F4 antibody can induce T cell proliferation *in vitro*. Additional reported applications (for relevant formats of this clone) include: immunohistochemistry of acetone-fixed frozen sections¹ and formaldehyde-fixed paraffin embedded sections⁴ immunofluorescence microscopy³, *in vivo* activation of T cell responses¹, and *in vivo* inhibition of T cell responses².

Application References:

1. Tanaka T, *et al.* 1989. *J. Immunol.* 142:2791. (Activ IHC IP)
2. Nicholls MR, *et al.* 1993. *Transplantation* 55:459. (Block)
3. Elbe A, *et al.* 1993. *J. Invest. Dermatol.* 102:74. (IF)
4. Baba T, *et al.* 2006. *Blood* 107:2004. (IHC)
5. Li X, *et al.* 2009. *J. Immunol.* 183:3955. (FC) PubMed
6. Treacy Q, *et al.* 2012. *PLoS One.* 7:e42662. PubMed.

Description: CD3 is a complex composed of δ, γ, ε, and ζ chains. They are 20-25 kD members of the immunoglobulin superfamily and associated with the T cell receptor (TCR). CD3 is expressed on thymocytes, peripheral T cells, some NK-T cells, and dendritic epidermal T cells. CD3 is involved in antigen recognition, signal transduction, and T cell activation.

Antigen References:

1. Tanaka T, *et al.* 1989 *J. Immunol.* 142:2791.
2. Elbe A, *et al.* 1993. *J. Invest. Dermatol.* 102:74.

Related Products:

Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
FITC Mouse IgM, κ Isotype Ctrl	MM-30	FC, ICFC



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