SONY

Product Data Sheet

FITC anti-rat CD3

Catalog # / Size: 1607015 / 100 µg

Clone: 1F4

Isotype: Mouse IgM, κ

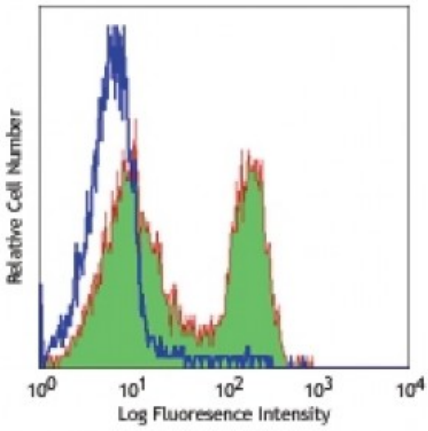
Immunogen: F344 rat spleen cells stimulated with PMA and calcium ionophore

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



LOU rat splenocytes stained with 1F4 FITC

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL 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 sections[4,5] 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. Fujishiro J, *et al.* 2010. *Am. J. Transplant.* 10:1545-55. (IHC-P)
6. Li X, *et al.* 2009. *J. Immunol.* 183:3955. (FC) 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.

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