

PerCP/Cyanine5.5 anti-rat CD3

Catalog # / Size: 1607085 / 25 µg
1607090 / 100 µg

Clone: 1F4

Isotype: Mouse IgM, κ

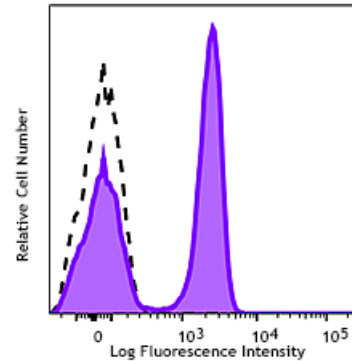
Immunogen: F344 rat spleen cells stimulated with PMA and calcium ionophore

Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.

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

Concentration: 0.2 mg/mL



Lewis rat splenocytes were stained with CD3 (clone 1F4) PerCP/Cyanine5.5 (filled histogram) or mouse IgM, κ PerCP/Cyanine5.5 isotype control (open histogram).

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 ≤ 1.0 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

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