

Product Information



CD3 Monoclonal FITC Antibody (Clone RIV9)

Item No. 10231

- Contents:** This vial contains 100 µg of fluorescein-labeled IgG₃ in 500 µl PBS, pH 7.2, containing 50% glycerol, 0.1% BSA, and 0.02% sodium azide.
- Host:** Mouse, clone RIV9
- Cross Reactivity:** (+) Human; other species not tested
- Stability:** ≥1 year at -20°C
- Applications:** Flow cytometry (FC), immunofluorescence (IF), and immunohistochemistry (IHC) (frozen sections); the recommended starting dilution for FC is 5 µg/ml (25 µl/test) and 10-20 µg/ml for IF and IHC (frozen sections). Not recommended for IHC (paraffin-embedded tissue) or western blot. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

The CD3 antigen is a specific T-cell marker expressed on thymocytes and mature T-lymphocytes. The CD3 complex contains CD3γ ($M_r = 26$ kDa), CD3δ ($M_r = 21$ kDa), and CD3ε ($M_r = 20$ kDa).¹ CD3 is detected on the surface membrane or in the cytoplasm of T-cells from peripheral blood, depending on the state of cell differentiation. In addition to detection of T-cells from peripheral blood, the CD3 antibody can be used for detection of reactive T-cells in lymphoid infiltrates in tissues and neoplastic T-cells in non-Hodgkin's lymphomas of T-cell lineage.^{2,3}

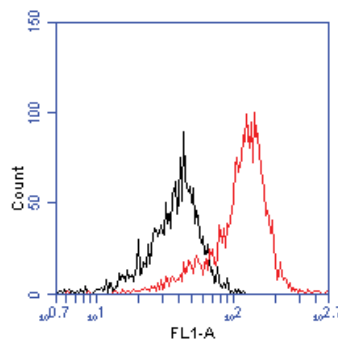


Figure 1: Human peripheral blood stained without and with 5 µg/ml CD3-FITC antibody (30 minutes stain/lyse/read method)

References

- Berkhout, B., Alarcon, B., and Terhorst, C. Transfection of genes encoding the T-cell receptor-associated CD3 complex into COS cells results in assembly of the macromolecular structure. *J. Biol. Chem.* **263**(17), 8528-8536 (1988).
- Ceuppens, J.L. and Van Vaeck, F. Human T cell activation induced by a monoclonal mouse IgG₃ anti-CD3 antibody (RIV9) requires binding of the Fc part of the antibody to the monocytic 72-kDa high-affinity Fc receptor (FcRI)1. *Cell. Immunol.* **118**, 136-146 (1989).
- Jiskoot, W., Hoven, A.-M.V., De Koning, A.A.M., *et al.* Purification and stabilisation of a poorly soluble mouse IgG₃ monoclonal antibody. *J. Immunol. Methods* **138**, 181-189 (1991).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10231

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

Copyright Cayman Chemical Company, 08/08/2013

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com