

# PRODUCT INFORMATION



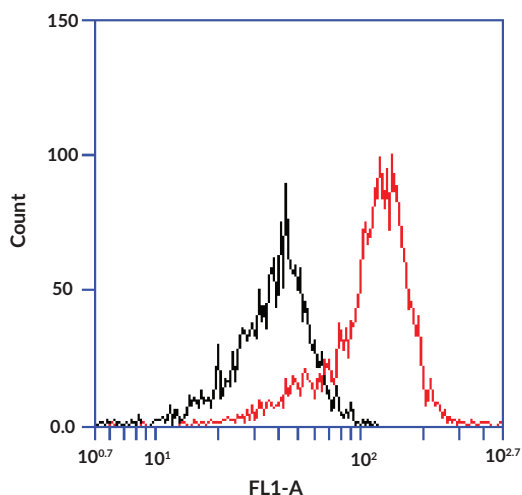
## CD3 Monoclonal FITC Antibody (Clone RIV9)

Item No. 10231

### Overview and Properties

**Contents:** This vial contains 100 µg of fluorescein-labeled affinity-purified monoclonal antibody.  
**Cross Reactivity:** (+) Human  
**Form:** Liquid  
**Storage:** -20°C (as supplied)  
**Stability:** ≥1 year  
**Storage Buffer:** 500 µl PBS, pH 7.2, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide  
**Clone:** RIV9  
**Host:** Mouse  
**Isotype:** IgG3  
**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 tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. 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**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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The CD3 antigen is a specific T-cell marker expressed on thymocytes and mature T-lymphocytes. The CD3 complex contains CD3g ( $M_r = 26$  kDa), CD3d ( $M_r = 21$  kDa), and CD3e ( $M_r = 20$  kDa).<sup>1</sup> 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.<sup>2,3</sup>

## References

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1. 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).
2. Ceuppens, J.L. and Van Vaeck, F. Human T cell activation induced by a monoclonal mouse IgG<sub>3</sub> 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).
3. Jiskoot, W., Hoven, A.-M.V., De Koning, A.A.M., *et al.* Purification and stabilisation of a poorly soluble mouse IgG<sub>3</sub> monoclonal antibody. *J. Immunol. Methods* **138**, 181-189 (1991).

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