FITC-Labeled Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3)

Catalog # FABm001-03

Source

Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3) is a monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which provides higher batch consistency and long term security of supply.

Application

Flow Cytometry (Evaluation of the expression of CD3 on Human cells).

Clone

OKT3

Species

Mouse

Isotype

Mouse IgG2a | Mouse Kappa

Specificity

This product is a specific antibody specifically reacts with CD3 protein.

Reactivity

Human

Immunogen

Purified Human CD3ε Protein.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Isotype Control

The Isotype control is sold separately and you can search for Cat. No. ***DNP-FM487*** for product information.

Recommended Dilution

1:20

Formulation

Supplied as 0.2 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

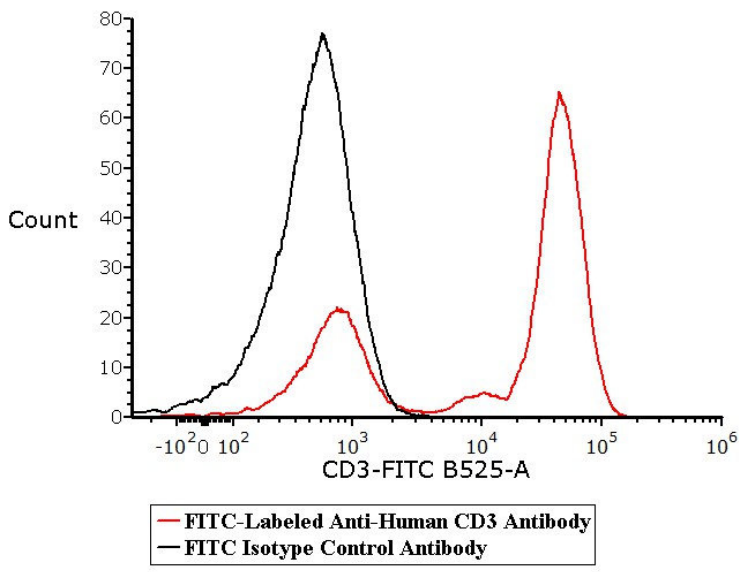
Storage

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- Store at 2-8 °C for 12 months.

Bioactivity-FACS



Flow cytometric analysis of Human peripheral blood lymphocytes respectively staining with FITC-Labeled Monoclonal Anti-Human CD3 Antibody Mouse IgG2a (Cat. No. FABm001-03) at 1:20 dilution (5 µL of the antibody stock solution corresponds to labeling of 2.5e5 cells in a final volume of 100 µL), compared with isotype control antibody. FITC signal was used to evaluate the binding activity (QC tested).

Background

CD3e molecule, epsilon is also known as CD3E, is a T-cell surface single-pass type I membrane glycoprotein. CD3E contains 1 Ig-like (immunoglobulin-like) domain and 1 ITAM domain. CD3E, together with CD3-gamma, CD3-delta and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. CD3E plays an essential role in T-cell development, and defects in CD3E gene cause severe immunodeficiency. CD3E gene has also been linked to a susceptibility to type I diabetes in women. CD3E has been shown to interact with TOP2B, CD3EAP and NCK2.

Clinical and Translational Updates