

FITC Anti-Human CD3 (Hit3a) Antibody

Catalog # ATB10092

Specification

FITC Anti-Human CD3 (Hit3a) Antibody - Product Information

Application FC

Isotype Mouse IgG2a, kappa Concentration 5 uL (0.5 ua)/test Reactivity Human

Formulation 10 mM NaH2PO4, 150 mM NaCl, 0.09%

NaN3, 0.1% gelatin, pH7.2

Host Mouse

FITC Anti-Human CD3 (Hit3a) Antibody - Additional Information

Gene ID 916 Gene Name CD3E

Alternative Name(s)

Leu-4, T3

Format

FITC

Preparation

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

Application Notes

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10e5 to 1x10e8 cells.

Storage Conditions

2-8°C protected from light

FITC Anti-Human CD3 (Hit3a) Antibody - Protocols

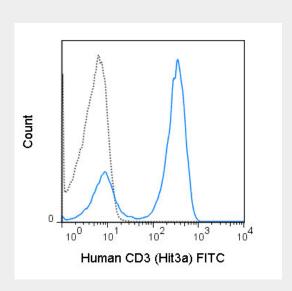
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

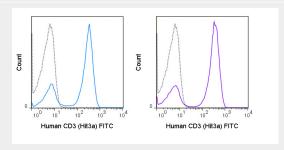


- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FITC Anti-Human CD3 (Hit3a) Antibody - Images



Human peripheral blood lymphocytes were stained with 5 uL (0.5 ug) FITC Anti-Human CD3 (ATB10092) (solid line) or 0.5 ug FITC Mouse IgG2a isotype control (dashed line).



Human peripheral blood lymphocytes were stained with the recommended volume of FITC Anti-Human CD3 (Hit3a) manufactured by Tonbo Biosciences (left panel) or BioLegend (right panel).

FITC Anti-Human CD3 (Hit3a) Antibody - Background

The Hit3a antibody is specific for human CD3e, also known as CD3 epsilon, a 20 kDa subunit of the T cell receptor complex, along with CD3 gamma and CD3 delta. These integral membrane protein chains assemble with additional chains of the T cell receptor (TCR), as well as CD3 zeta chain, to form the T cell receptor – CD3 complex. Together with co-receptors CD4 or CD8, the complex serves to recognize antigens bound to MHC molecules on antigen-presenting cells. These interactions promote T cell receptor signaling (T cell activation), inducing cell proliferation, differentiation, production of cytokines or activation-induced cell death. CD3 is differentially expressed during thymocyte-to-T cell development and on all mature T cells. The Hit3a antibody is a widely used phenotypic marker for human T cells. In addition, binding/cross-linking of Hit3a antibody to CD3e can induce cell activation. The antibody has also been demonstrated to be cross-reactive with Chimpanzee CD3.