

---

### Mouse Anti-Human CD3-PE conjugate

**Catalog #**      **CD03P-100**      **SIZE:** 100 Tests  
**Catalog #**      **CD03P-25**      **SIZE:** 25 Tests

#### PRODUCT INFORMATION

**CLONE:**            HIT3a  
**ISOTYPE:**        Mouse IgG2a,  $\kappa$   
**WS.No.:**         □5T CD03.05  
**OTHER RECOMMENDED CLONE:**  
HIT3b , Mouse IgG1

**Product Forms:** Purified, FITC conjugation, PE conjugation, PE-Cy5 conjugation.

#### DESCRIPTION

CD3 McAb recognizes the 17-19 KD $\epsilon$ -chain and reacts with this  $\epsilon$ -chain of the CD3 antigen/T cell antigen receptor(TCR) complex. CD3 antigen appears in the cytoplasm of the cell during the early stage of T cell development and is expressed on the cell membrane at the late stage. CD3 antigen is present on 60%-80% of normal peripheral blood lymphocytes and 60%-70% of thymocytes and plays an important role in signal transduction after antigen recognition by TCR. HIT3a McAb at ng level has a strong mitogenic effect on T lymphocyte proliferation (in soluble or immobilized conditions) and has a immunosuppressive effect at high dose. HIT3b McAb has a strong mitogenic effect on T lymphocytes proliferation only under immobilized condition. In addition, NK cells express CD3 chain in the cytoplasm, and CD3 McAb provide a tool for analyzing the development relationship and the common precursor of both T cells and NK cells.

#### PREPARATION

The monoclonal antibody is purified from ascites by protein G affinity chromatography and is conjugated with FITC, R-PE, PE-Cy5 under optimum conditions.

#### USAGE

The purified reagent is effective for indirect immunofluorescence staining of human cells for flow cytometric analysis and is tested for immunohistochemical staining of acetone-fixed frozen sections.

The conjugated reagent (FITC, R-PE) is tested for flow cytometric analysis using 20 $\mu$ l/10<sup>6</sup> cells or 100 $\mu$ l peripheral blood cells.

The conjugated reagent (PE-Cy5) is tested for flow cytometric analysis using 10 $\mu$ l/10<sup>6</sup> cells or 100 $\mu$ l peripheral blood cells.

#### STORAGE

For purified forms, long term storage at -20oC.

For conjugated forms, storage at 4oC, should not be frozen and avoid prolonged exposure to light.

#### REFERENCES

1. Shen DC., Yang XF., Yung CY., et al., 1993. A high affinity CD3 monoclonal antibody HIT3a I. production and indentification. ACTA Academiae Medicinae Sinicae. 15(3):157
2. Schlossman S., L. Bloumsell, W. Gilks, et al., eds. 1995. Leucocyte Typing □: White Cell Differentiation Antigens. P: 245, 262 Oxford University Press, New York.
3. Tadimitsu K, K.Hitoshi, A.E.G.Kr.van dem Borne, et al., eds. 1997. Leucocyte Typing □: White Cell Differentiation Antigens. P: 44—48 Garland Publishing, Inc., New York.

#### India Contact:

#### Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)