

## Mouse Anti Human CD3 PE

### PRODUCT INFORMATION

<b>CLONE:</b>	HIT3a
<b>ISOTYPE:</b>	Mouse IgG2a, $\kappa$
<b>WS.No.:</b>	V 5T CD03.05
<b>CATALOG#:</b>	A6063/A6073
<b>CONTENTS:</b>	RPE - conjugated antibody buffered in 10mM PBS (pH 7.0) with 0.05% $\text{NaN}_3$ and 1% BSA.

### DESCRIPTION

CD3 McAb recognizes the 17-19 KDa  $\epsilon$ -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. 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 RPE under optimum conditions.

### USAGE

The conjugated reagent is tested for flow cytometric analysis using  $20\mu\text{l}/10^6$  cells.

### STORAGE

Store at  $4^\circ\text{C}$ . Conjugated forms 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 identification. ACTA Academiae Medicinae Sinicae. 15(3):157
2. Schlossman S., L. Bloumsell, W. Gilks, et al., eds. 1995. Leucocyte Typing V: White Cell Differentiation Antigens. P: 245, 262 Oxford University Press, New York.
3. Tadamitsu K, K.Hitoshi, A.E.G.Kr.van dem Borne, et al., eds. 1997. Leucocyte Typing VI: White Cell Differentiation Antigens. P: 44—48 Garland Publishing, Inc., New York.

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