

## Anti-Human CD3 PE

Catalogue Number : 05111-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

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### Product Information

**Clone:** Hit3a

**Format/Conjugate:** PE

**Concentration:** 5 uL (0.25 ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm), Yellow/Green (532-561nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

**Brightness (1=dim,5=brightest):** 5

**Isotype:** Mouse IgG2a, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The Hit3a monoclonal antibody specifically reacts with the  $\epsilon$  chain of the CD3/T lymphocyte antigen receptor complex. The CD3 complex is part of the TCR complex, expressed by all mature T lymphocytes and by the thymocyte lineage. CD3 enhances the antigen recognition by signal transduction.

The HIT3a antibody cross-links with the TCR complex, initiating the cellular activation and proliferation, but it cannot be used for intracellular CD3 staining, as it is able to stain only the surface CD3 complex.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. The antibody can be used at less than or equal to 5  $\mu$ L per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100  $\mu$ L.

### References

1. McMichael, A. J. (1987). Leucocyte typing III.; Oxford University Press, Oxford. Norton AJ, Isaacson PG (1985)
2. Knapp W;(1989) Leucocyte typing IV: white cell differentiation antigens. Oxford University Press, 1989.
3. Schlossman, S., L. Bloumsell, et al. eds (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York
4. Lanier, L. L., Allison, J. P., ; Phillips, J. H. (1986). Correlation of cell surface antigen expression on human thymocytes by multi-color flow cytometric analysis: implications for differentiation.; The Journal of Immunology.; 137(8), 2501-2507.