

## Anti-Human CD3 FITC

Catalogue Number : 05131-50

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

### Product Information

**Clone:** UCHT1

**Format/Conjugate:** FITC

**Concentration:** 5 uL (1 ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm)

**Peak Emission:** 520nm

**Peak Excitation:** 494nm

**Filter:** 530/30

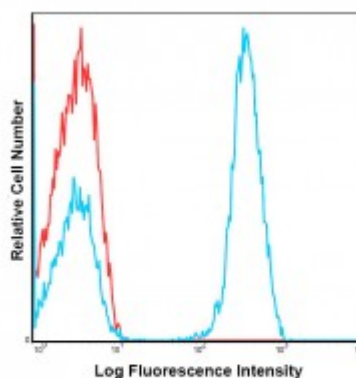
**Brightness (1=dim,5=brightest):** 3

**Isotype:** Mouse IgG1, 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



Human peripheral blood lymphocytes were stained with FITC UCHT1 with relevant isotype control in Red.

### Description

The UCHT1 monoclonal antibody specifically reacts with the  $\epsilon$  chain of the CD3/T lymphocyte antigen receptor complex. The CD3 complex contains  $\gamma$ ,  $\delta$ , and  $\epsilon$  chains, and it 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.

Unlike HIT3a, another specific antibody of CD3, the UCHT1 antibody can stain both the surface and intracellular CD3 $\epsilon$ . The immobilized UCHT1 can cross-link with the TCR complex, enhancing cellular activation and proliferation.

### 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.Knapp W (1989) Leucocyte typing IV: white cell differentiation antigens. Oxford University Press, 1989.
2. McMichael, A. J. (1987). Leucocyte typing III.;Oxford University Press, Oxford. Norton AJ, Isaacson PG (1985)
3. Beverley, P. C., ; Callard, R. E. (1981). Distinctive functional characteristics of human T lymphocytes defined by E rosetting or a monoclonal anti-T cell antibody.;European journal of immunology,;11(4), 329-334.