

## Anti-Human CD3 FITC

Catalog Number :05141-50

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

### Product Information

**Clone:** SK7

**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

### Description

The SK7 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. The SK7 antibody is reported to have a mitogenic effect on the majority of peripheral blood T cells in the presence of functional monocytes.

### 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. Van Dongen, J. J., Krissansen, G. W., Wolvers-Tettero, I. L., Comans-Bitter, W. M., Adriaansen, H. J., Hooijkaas, H., ... Terhorst, C. (1988). Cytoplasmic expression of the CD3 antigen as a diagnostic marker for immature T-cell malignancies. *Blood*, 71(3), 603-612.
2. Haynes, B. F. (1986). Summary of T cell studies performed during the second international workshop and conference on human leukocyte differentiation antigens. In: *Leukocyte typing II*; (pp. 3-30). Springer New York.
3. Kap, Y. S., van Meurs, M., van Driel, N., Koopman, G., Melief, M. J., Brok, H. P., ... A't Hart, B. (2009). A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. *Journal of Histochemistry Cytochemistry*, 57(12), 1159-1167.