

Anti-Human CD45 FITC

Catalog Number :07151-50

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

Product Information

Clone: 2D1

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 2D1 monoclonal antibody specifically reacts all isoforms of human CD45, known as the Leukocyte Common Antigen (LCA). It is expressed on lymphocytes, granulocytes, monocytes, thymocytes, and eosinophils, but not on mature erythrocytes, platelets, mature erythroid cells of bone marrow, and non-hematopoietic tissues. CD45 is essential for T cell activation and the tyrosine phosphatase activity of its intracellular region is integral for signal transduction.

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 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

References

1. Merckenschlager, M., Beverley, P. C. (1989). Evidence for differential expression of CD45 isoforms by precursors for memory-dependent and independent cytotoxic responses: human CD8 memory CTLp selectively express CD45R0 (UCHL1).; *International Immunology*,;1(4), 450-459.
2. Bikoue, A., Janossy, G., Barnett, D. (2002). Stabilised cellular immuno-fluorescence assay: CD45 expression as a calibration standard for human leukocytes.; *Journal of immunological methods*,;266(1-2), 19-32.
3. Pfau, J. C., Walker, E., Card, G. L. (2000). Monoclonal antibodies to CD45 modify LPS-induced arachidonic acid metabolism in macrophages.; *Biochimica et Biophysica Acta (BBA)-Molecular Cell Research*,;1495(3), 212-222.