

Anti-Mouse CD3e PE

Catalogue Number : 05122-60

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

Product Information

Clone: 145-2C11

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

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

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

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

Isotype: Armenian Hamster IgG

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 145-2C11 monoclonal antibody reacts with mouse CD3e, the 20 kDa ϵ chain of the TCR complex. Together with the γ and δ subunits of CD3, the ϵ subunits are involved in the assembly, trafficking, and surface expression of T-cell receptor complex. CD3 is expressed on thymocytes, mature T cells, and natural killer T cells, and the ϵ chain enhances the antigen recognition.

The 145-2C11 antibody binds to the TCR complex and, depending on the conditions, initiates T cells activation, proliferation, and apoptosis. The soluble antibody seems to block lysis of target cells by antigen-specific cytotoxic T lymphocytes.

The 145-2C11 antibody does not cross-react with the rat leukocytes, and it is used as a phenotypic marker for mouse T lymphocytes.

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. For flow cytometric staining, the suggested use of this reagent is ≤1 ug per million cells in 100 μ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Leo, O., Foo, M., Sachs, D. H., Samelson, L. E., ; Bluestone, J. A. (1987). Identification of a monoclonal antibody specific for a murine T3 polypeptide. Proceedings of the National Academy of Sciences.;84(5), 1374-1378.
2. Nakano, H., Yamazaki, T., Miyatake, S., Nozaki, N., Kikuchi, A., ; Saito, T. (1996). Specific Interaction of Topoisomerase II and the CD3 Chain of the T Cell Receptor Complex.;Journal of Biological Chemistry.;271(11), 6483-6489.
3. Salmund, R. J., Filby, A., Pirinen, N., Magee, A. I., ; Zamoyska, R. (2011). Mislocalization of Lck impairs thymocyte differentiation and can promote development of thymomas.;Blood.;117(1), 108-117.