



CD3e Antibody [145-2C11] (PE-Cy7)

CATALOG NUMBER: 76-275

Specifications

SPECIES REACTIVITY:	Mouse
TESTED APPLICATIONS:	FACS
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The 145-2C11 monoclonal antibody reacts with mouse CD3e, the 20 kDa epsilon chain of the TCR complex.
HOST SPECIES:	Hamster

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.
CONCENTRATION:	0.2 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Armenian Hamster IgG
CONJUGATE:	PE-Cy7

Additional Info

ALTERNATE NAMES:	CD3, T3e, AI504783, CD3epsilon, Cd3e
OFFICIAL SYMBOL:	Cd3e
GENE ID:	12501

Background

BACKGROUND:	The 145-2C11 monoclonal antibody reacts with mouse CD3e, the 20 kDa epsilon chain of the TCR complex. Together with the gamma and delta subunits of CD3, the epsilon 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 epsilon 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.
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) Salmond, 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.

FOR RESEARCH USE ONLY

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