TECHNICAL DATA SHEET

PE Anti-Mouse CD3e (145-2C11)

Catalog Number: 50-0031

PRODUCT INFORMATION

Contents: PE Anti-Mouse CD3e (145-2C11)

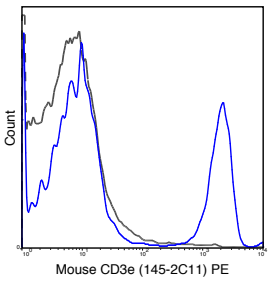
Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

Clone: 145-2C11

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 1 ug Anti-Mouse CD3e PE (50-0031) (solid line) or 1 ug Armenian hamster IgG PE isotype control (dashed line).

DESCRIPTION

The 145-2C11 antibody is specific for mouse CD3e, also known as CD3 epsilon, a 20 kDa subunit of the T cell receptor complex, along with CD3 gamma and CD3 delta. These integral membrane protein chains assemble with additional chains of the T cell receptor (TCR), as well as CD3 zeta chain, to form the T cell receptor – CD3 complex. Together with co-receptors CD4 or CD8, the complex serves to recognize antigens bound to MHC molecules on antigen-presenting cells. Such interactions promote T cell receptor signaling (T cell activation) and can result in a number of cellular responses including proliferation, differentiation, production of cytokines or activation-induced cell death. CD3 is differentially expressed during thymocyte-to-T cell development and on all mature T cells.The 145-2C11 antibody is a widely used phenotypic marker for mouse T cells. In addition, binding of 145-2C11 antibody to CD3e can induce cell activation. A recent publication of the crystal structure of a murine CD3e-mitogenic antibody complex provides further insight into the action of commonly used agonist antibodies (Fernandes, R.A. et al. 2012. J. Biol. Chem. 287: 13324-13335).

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

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