

Datasheet for ABIN7278075 **anti-CD3 epsilon antibody (Biotin)**

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Overview

Quantity:	100 µg
Target:	CD3 epsilon (CD3E)
Reactivity:	Mouse
Host:	Armenian Hamster
Clonality:	Monoclonal
Conjugate:	This CD3 epsilon antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS)

Product Details

Clone:	145-2C11
Isotype:	IgG
Purification:	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.

Target Details

Target:	CD3 epsilon (CD3E)
Alternative Name:	CD3e (CD3E Products)
Background:	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

Target Details

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).

Gene ID: 12501

UniProt: [P22646](#)

Pathways: [TCR Signaling](#), [CXCR4-mediated Signaling Events](#), [Ubiquitin Proteasome Pathway](#)

Application Details

Application Notes: This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

Comment: 0.5 mg/mL

Restrictions: For Research Use only

Handling

Buffer: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09 % Sodium azide, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C

Storage Comment: 2-8°C protected from light

Handling

Expiry Date: 12 months