Anti-Mouse CD3ε Antibody, Clone 145-2C11, FITC

Antibodies

Hamster (Armenian) monoclonal IgG1 antibody against mouse CD3ε, FITC-conjugated

Catalog #60015FI
#60015FI.1
500 µg 0.5 mg/mL
50 µg 0.5 mg/mL

Product Description

The 145-2C11 antibody reacts with the ~20 kDa CD3ε subunit of the mouse T cell receptor (TCR)/CD3 complex, which is expressed on the surface of circulating mature T cells and NKT cells, and variably on thymocytes. A majority of T cell neoplasms also express CD3. The CD3 complex, which is assembled from combinations of CD3γ, δ, ε, η, and ζ subunits, associates non-covalently with the TCR and is involved in transducing antigen recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR. Activation of T cells by the TCR involves the cytoplasmic tails of the CD3 subunits, which are structurally related type 1 transmembrane proteins and members of the immunoglobulin superfamily. Mutations in the CD3 subunits have been associated with various immunodeficiency disorders including severe combined immunodeficiency (SCID). The 145-2C11 antibody has been used for in vitro functional (blocking and activation) assays and has been reported to block binding by the clone 17A2 antibody. The 145-2C11 antibody is not recommended for use with formalin-fixed, paraffin-embedded sections.

Target Antigen Name: CD3ε
Alternative Names: CD3, CD3epsilon, T3
Gene ID: 12501
Species Reactivity: Mouse
Host Species: Hamster (Armenian)
Clonality: Monoclonal
Clone: 145-2C11
Isotype: IgG1, kappa
Immunogen: H-2Kb-specific mouse cytotoxic T lymphocyte clone BM10-37
Conjugate: FITC (Fluorescein isothiocyanate)

Applications

Verified: FC
Reported: FACS, FC, ICC, IF
Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851) and EasySep™ Mouse CD90.2 Positive Selection Kit II (Catalog #18951).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification: The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use: For flow cytometry, the suggested use of this antibody is ≤ 1 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.
Data

Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD3ε Antibody, Clone 145-2C11, FITC (filled histogram) or an Armenian hamster IgG FITC isotype control antibody (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References