Antibodies

Anti-Mouse CD3e Antibody, Clone 145-2C11, Alexa Fluor® 488

Hamster (Armenian) monoclonal IgG1 antibody against mouse CD3e, Alexa Fluor® 488-conjugated

Catalog #60015AD

100 µg 0.5 mg/mL

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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:	CD3e
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:	Alexa Fluor® 488

Applications

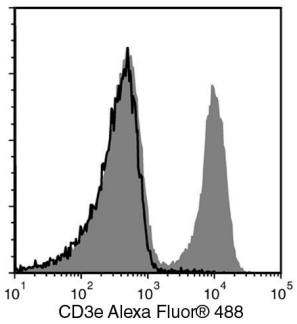
Verified:	FC
Reported:	FC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851) and EasySep™ Mouse CD90.2 Positive Selection Kit II (Catalog #18951).

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 Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.
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 ≤ 2 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 CD3e Antibody, Clone 145-2C11, Alexa Fluor® 488 (filled histogram) or an Armenian hamster IgG Alexa Fluor® 488 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

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