Anti-Mouse CD3e Antibody, Clone 145-2C11, PerCP-Cy5.5

Antibodies

Hamster (Armenian) monoclonal IgG1 antibody against mouse CD3e, PerCP-

Cy5.5-conjugated

Catalog #60015PS #60015PS.1

100 μg0.2 mg/mL25 μg0.2 mg/mL



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Product Description

The 145-2C11 antibody reacts with the ~20 kDa CD3 ϵ subunit of the mouse T cell receptor (TCR)/CD3 complex, which is expressed on the surface of circulating mature T cells and NK-T cells, and variably on thymocytes. A majority of T cell neoplasms also express CD3. The CD3 complex, which is assembled from combinations of CD3 γ , 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 super family. 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 BM10-43

Conjugate: PerCP-Cy5.5

Applications

Verified: FC Reported: FC

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; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

Properties

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin

Purification: The antibody was purified by affinity chromatography and conjugated with PerCP-Cy5.5 under optimal

conditions. The solution is free of unconjugated PerCP-Cy5.5.

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 ≤ 0.25 µg per 1 x 10e6 cells in 100 µL volume. It is

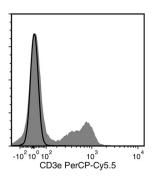
recommended that the antibody be titrated for optimal performance for each application.

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Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD3e Antibody, Clone 145-2C11, PerCP-Cy5.5 (filled histogram) or an Armenian hamster IgG isotype control antibody, PerCP-Cy5.5 (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

- 1. Leo O, et al. Identification of a monoclonal antibody specific for a murine T3 polypeptide. Proc Natl Acad Sci USA 84(5): 1374-48, 1987 (FA, FC, IP)
- 2. Portoles P, et al. Monoclonal antibodies to murine CD3 epsilon define distinct epitopes, one of which may interact with CD4 during T cell activation. J Immunol 142(12): 4169-75, 1989 (FA, IP)
- 3. Payer E, et al. Circulating CD3+/T cell receptor V gamma 3+ fetal murine thymocytes home to the skin and give rise to proliferating dendritic epidermal T cells. J Immunol 146(8): 2536-43, 1991 (FACS, FC, IF, IHC)
- 4. Salvadori S, et al. Abnormal signal transduction by T cells of mice with parental tumors is not seen in mice bearing IL-2-secreting tumors. J Immunol 153(11): 5176-82, 1994 (FA/Activation, FC, WB)
- 5. Castro JE, et al. Fas modulation of apoptosis during negative selection of thymocytes. Immunity 5(6): 617-27, 1996 (FA/Activation)
- 6. Schuchert MJ, et al. Characterization of a newly discovered T-cell receptor beta-chain heterodimer expressed on a CD8+ bone marrow subpopulation that promotes allogeneic stem cell engraftment. Nat Med 6(8): 904-09, 2000 (FC, IP)
- 7. Takeuchi A, et al. CCR5-deficient mice develop experimental autoimmune uveoretinitis in the context of a deviant effector response. Invest Ophthalmol Vis Sci 46(10): 3753-60, 2005 (IF, IHC)
- 8. Chappaz S, et al. Increased TSLP availability restores T- and B-cell compartments in adult IL-7 deficient mice. Blood 110(12): 3862-70, 2007 (FC, IF, IHC)
- 9. Qi Q, et al. Enhanced development of CD4+ gammadelta T cells in the absence of ltk results in elevated IgE production. Blood 114(3): 564-71, 2009 (FACS, FC)
- 10. Loubaki L, et al. In vivo depletion of leukocytes and platelets following injection of T cell-specific antibodies into mice. J Immunol Methods 393(1-2): 38-44, 2013 (FA/Depletion, FC)
- 11. Shiheido H, et al. Novel CD3-specific antibody induces immunosuppression via impaired phosphorylation of LAT and PLCγ1 following T-cell stimulation. Eur J Immunol 44(6): 1770-80, 2014 (FA, FC)
- 12. Xia CQ, et al. Anti-CD3 antibody treatment induces hypoglycemia and super tolerance to glucose challenge in mice through enhancing glucose consumption by activated lymphocytes. J Immunol Res 2014: 326708, 2014 (FA)

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