Anti-Mouse CD45 Antibody, Clone 30-F11, APC

Antibodies

Rat monoclonal IgG2b antibody against mouse CD45, APC-conjugated

Catalog #60030AZ #60030AZ.1 100 μg 0.2 mg/mL

25 μg 0.2 mg/mL



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Product Description

The 30-F11 antibody reacts with an extracellular epitope found on all isoforms and both alloantigens (CD45.1 and CD45.2) of mouse CD45, a type I transmembrane glycoprotein expressed on the surface of most hematopoietic cells except mature erythrocytes, platelets and plasma cells; expression of CD45 is lost during differentiation of these cell types. CD45 is a member of the protein tyrosine phosphatase family and functions in a number of immunoregulatory processes, including cell activation, growth, differentiation and oncogenic transformation. The large cytoplasmic portion of CD45 contains two tyrosine phosphatase domains, one which is enzymatically active, that are involved in modulating the function of intracellular substrates such as the Src kinases Lck and Fyn. Several isoforms of CD45 have been identified, the expression of which differs according to cell type and functional status. Alternative splicing of three exons (4, 5, 6) encoding the extracellular RA, RB and RC polypeptide sequences gives rise to up to 8 isoforms with molecular masses in the range of 180 - 240 kDa.

Target Antigen Name: CD45

Alternative Names: LCA, Leukocyte common antigen, Ly-5, Protein tyrosine phosphatase receptor type C, PTPRC, T200

Gene ID: 19264
Species Reactivity: Mouse
Host Species: Rat (LOU)
Clonality: Monoclonal
Clone: 30-F11

Isotype: IgG2b, kappa

Immunogen: Mouse thymus or spleen

Conjugate: APC

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 CD19 Positive Selection Kit II (Catalog #18954).

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 APC under optimal conditions. The

solution is free of unconjugated APC and unconjugated antibody.

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 10^6 cells in 100 µL volume. It is

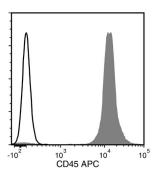
recommended that the antibody be titrated for optimal performance for each application.

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Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD45 Antibody, Clone 30-F11, APC (filled histogram) or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530, APC (Catalog #60077AZ) (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. Cunha MCR et al. (2013) Protein malnutrition induces bone marrow mesenchymal stem cells commitment to adipogenic differentiation leading to hematopoietic failure. PLoS One 8(3): e58872. (FC)
- 2. Treviño-Villarreal JH et al. (2011) Host-derived pericytes and Sca-1+ cells predominate in the MART-1- stroma fraction of experimentally induced melanoma. J Histochem Cytochem 59(12): 1060–75. (CellSep)
- 3. McKinney-Freeman SL et al. (2009) Surface antigen phenotypes of hematopoietic stem cells from embryos and murine embryonic stem cells. Blood 114(2): 268–78. (CellSep, FC/FACS)
- 4. Dorrell C et al. (2008) Surface markers for the murine oval cell response. Hepatology 48(4): 1282-91. (FC/FACS)
- 5. Tan J et al. (1999) Microglial activation resulting from CD40-CD40L interaction after beta-amyloid stimulation. Science 286(5448): 2352–5. (IHC)
- 6. Tamaki K et al. (1996) Identification and characterization of novel dermal Thy-1 antigen-bearing dendritic cells in murine skin. J Invest Dermatol 106(3): 571–5. (IF, IHC)
- 7. Ledbetter JA & Herzenberg LA. (1979) Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. Immunol Rev 47: 63–90. (FA, FC, RIA)

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