Anti-Mouse CD45 Antibody, Clone 30-F11

Antibodies

Rat monoclonal IgG2b antibody against mouse CD45, unconjugated

Catalog #60030	500 µg	0.5 mg/mL
#60030.1	50 µg	0.5 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:	Unconjugated

Applications

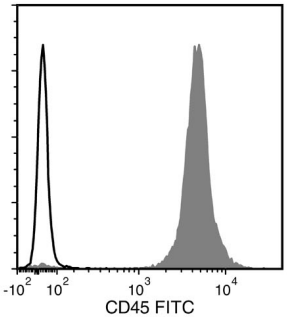
Verified:	FC
Reported:	CyTOF®, FA, FC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD19 Positive Selection Kit II (Catalog #18954).

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.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. 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.

Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD45 Antibody, Clone 30-F11, followed by a mouse anti-rat IgG2b antibody, FITC (filled histogram), or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530 (Catalog #60077), followed by a mouse anti-rat IgG2b antibody, FITC (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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