

Anti-Mouse CD45.1 Antibody, Clone A20, Biotin

Antibodies

Mouse monoclonal IgG2a antibody
against mouse CD45.1, biotin-
conjugated

Catalog #60117BT
#60117BT.1

500 µg 0.5 mg/mL
50 µg 0.5 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

The A20 monoclonal antibody reacts with mouse alloantigen CD45.1 (Ly5.1) expressed by all hematopoietic cells except mature erythrocytes and platelets in mouse strains RIII, SJL/J, STS/A, and DA. Clone A20 does not react with leukocytes that express CD45.2 alloantigen. CD45.1 is an allelic form of CD45 (leukocyte common antigen), a 180 - 240 kDa type I transmembrane glycoprotein. CD45 is a member of the protein tyrosine phosphatase (PTP) family and contains two catalytic domains in the intracellular (COOH) domain, which regulate cellular signaling. The extracellular domains are highly variable, due to alternative splicing among exons 4, 5, and 6, and differential glycosylation. These CD45 isoforms correlate to specific cell types, as well as specific activation and maturation states of immune cells. The A20 monoclonal antibody has been used extensively in adoptive cell transfer and bone marrow transplantation studies in mice, allowing for the differentiation of CD45.2- and CD45.1- expressing cells.

Target Antigen Name:	CD45.1
Alternative Names:	B220, CD45 antigen, CD45R, GP180, LCA, Leukocyte common antigen, Ly5.1, Lyt4, Protein tyrosine phosphatase receptor type C, Ptpcr, RT7.1, T200
Gene ID:	19264
Species Reactivity:	Mouse, does not react with mouse CD45.2
Host Species:	Mouse (A.SW)
Clonality:	Monoclonal
Clone:	A20
Isotype:	IgG2a, kappa
Immunogen:	SJL mouse thymocytes and splenocytes
Conjugate:	Biotin

Applications

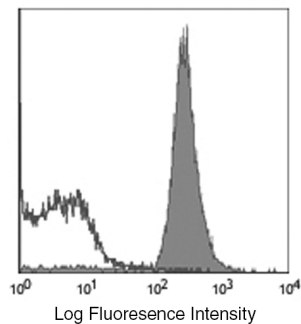
Verified:	FC
Reported:	FC, IHC, IF

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 biotin under optimal conditions. The solution is free of unconjugated biotin.
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 $\leq 0.25 \mu\text{g}$ per 1×10^6 cells in 100 μL . It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of SLJ mouse splenocytes labeled with Anti-Mouse CD45.1 Antibody, Clone A20, Biotin followed by streptavidin (SAV) PE (filled 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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