Anti-Mouse CD44 Antibody, Clone IM7, Biotin

Antibodies

Rat monoclonal IgG2b antibody against human, mouse, rhesus CD44 (tissue non-specific alkaline phosphatase), biotin-conjugated

Catalog	#60068BT	500 µg	0.5 mg/mL
	#60068BT.1	50 µg	0.5 mg/mL

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Product Description

The IM7 antibody reacts with CD44 (Ly-24), an ~80 - 95 kDa type 1 transmembrane glycoprotein involved in cell-cell and cell-matrix interactions. CD44 is expressed on the surface of many cells, including leukocytes and hepatocytes, as well as endothelial, epithelial, and mesenchymal cells. Expression levels increase upon activation of T and B cells, and memory cells exhibit a CD44high phenotype. CD44 binds many ligands, including hyaluronic acid, collagen, fibronectin, growth factors, and metalloproteinases, thus modulating processes such as lymphocyte activation, recirculation and homing, leukocyte rolling and aggregation, hematopoiesis, and tumor metastasis. Numerous disorders are associated with altered expression or dysfunction of CD44. Many CD44 isoforms have been identified, with alternative splicing, differential N- and O- glycosylation, and sulfation mediating the functional role(s) played by the protein in a specific cell. The IM7 monoclonal antibody reacts with an extracellular epitope found on all isoforms of CD44 and both murine allotypes.

Target Antigen Name:	CD44
Alternative Names:	ECMR III, gp85, H-CAM, Hermes, HUTCH-1, Ly24, Ly-24, Pgp-1
Gene ID:	12505/960
Species Reactivity:	Human, Mouse, Rhesus, Cynomolgus, Baboon, Chimpanzee, Squirrel Monkey, Cat, Cow, Dog, Horse, Pig
Host Species:	Rat
Clonality:	Monoclonal
Clone:	IM7
Isotype:	IgG2b, kappa
Immunogen:	Dexamethasone-induced cells from the SJL mouse spontaneous myeloid leukemia M1
Conjugate:	Biotin

Applications

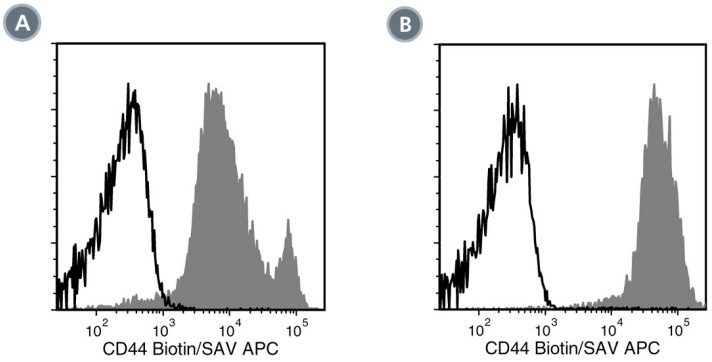
Verified:	CellSep, FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD4+ T Cell Isolation Kit (Catalog #19852), EasySep™ Mouse CD4+CD62L+ T Cell Isolation Kit (Catalog #18765), and EasySep™ Human Naïve CD4+ T Cell Isolation Kit (Catalog #19555).

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 ≤ 0.25 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



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD44 Antibody, Clone IM7, Biotin, followed by streptavidin (SAV) APC (filled histogram), or a biotinylated rat IgG2b, kappa isotype control antibody, followed by SAV APC (solid line histogram).
(B) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Mouse CD44 Antibody, Clone IM7, Biotin, followed by SAV APC (filled histogram), or a biotinylated rat IgG2b, kappa isotype control antibody, followed by SAV APC (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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