

Anti-Mouse CD44 Antibody, Clone IM7, Alexa Fluor® 488



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Antibodies

Rat monoclonal IgG2b antibody
against human, mouse, rhesus CD44,
Alexa Fluor® 488-conjugated

Catalog #60068AD.1	25 µg	0.5 mg/mL
#60068AD	100 µg	0.5 mg/mL

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

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, hepatocytes, endothelial, epithelial, and mesenchymal cells. Expression levels increase upon activation of T and B cells, and memory cells exhibit a CD44[High] 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, Ly-24, Ly24, 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:	Alexa Fluor® 488

Applications

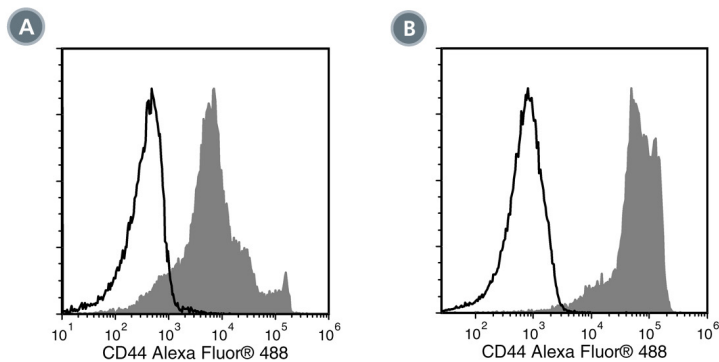
Verified:	FC
Reported:	FC, ICC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Naïve CD4+ T Cell Isolation Kit (Catalog #19765).

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
Purification:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.
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 request a lot-specific Certificate of Analysis from techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤1.0 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



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD44 Antibody, Clone IM7, Alexa Fluor® 488 (filled histogram) or a rat IgG2b, kappa Alexa Fluor® 488 isotype control antibody (open histogram).
(B) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Mouse CD44 Antibody, Clone IM7, Alexa Fluor® 488 (filled histogram) or a rat IgG2b, kappa Alexa Fluor® 488 isotype control antibody (open histogram).

Related Products

PRODUCT NAME	CATALOG #	SIZE
Anti-Mouse CD44 Antibody, Clone IM7	60068	500 µg
Anti-Mouse CD44 Antibody, Clone IM7, PE	60068PE.1	25 tests
Anti-Mouse CD44 Antibody, Clone IM7, PE	60068PE	100 tests
Anti-Mouse CD44 Antibody, Clone IM7, Biotin	60068BT.1	50 µg
Anti-Mouse CD44 Antibody, Clone IM7, Biotin	60068BT	500 µg
Anti-Mouse CD44 Antibody, Clone IM7, Alexa Fluor® 488	60068AD.1	25 µg
Anti-Mouse CD44 Antibody, Clone IM7, Alexa Fluor® 488	60068AD	100 µg

References

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4. Camp RL, et al. CD44 is necessary for optimal contact allergic responses but is not required for normal leukocyte extravasation. *J Exp Med* 178(2): 497-507, 1993 (Blocking, FA)
5. Katoh S, et al. Characterization of soluble CD44 in the circulation of mice. Levels are affected by immune activity and tumor growth. *J Immunol* 153(8): 3440-49, 1994 (ELISA)
6. Cuff CA, et al. The adhesion receptor CD44 promotes atherosclerosis by mediating inflammatory cell recruitment and vascular cell activation. *J Clin Invest* 108(7): 1031-40, 2001 (IHC)
7. Cichy J, Pure E. The liberation of CD44. *J Cell Biol* 161(5): 839-43, 2003
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