

## Antibodies

### Anti-Mouse CD44 Antibody, Clone IM7



Scientists Helping Scientists™ | WWW.STEMCELL.COM

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

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Catalog #60068  
#60068.1

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

500 µg 0.5 mg/mL  
50 µg 0.5 mg/mL

## 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:	Unconjugated

## Applications

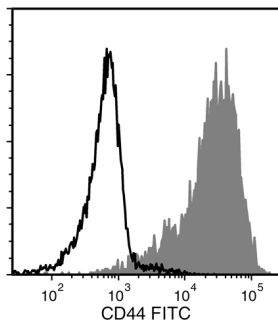
Verified:	CellSep, FC
Reported:	Blocking, CyTOF®, ELISA, FA, FC, ICC, IF, IHC, IP
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD4+ T Cell Isolation Kit (Catalog #19852), EasySep™ Mouse CD4+CD62L+ T Cell 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.
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 ≤ 0.5 µg per 1 x 10 <sup>6</sup> cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Mouse CD44 Antibody, Clone IM7, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or a rat IgG2b, kappa isotype control antibody, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, 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](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Kenna TJ et al. (2008) Steady-state dendritic cells expressing cognate antigen terminate memory CD8+ T-cell responses. *Blood* 111(4): 2091–100.
2. Cichy J & Puré E. (2003) The liberation of CD44. *J Cell Biol* 161(5): 839–43.
3. Naor D & Nedvetzki S. (2003) CD44 in rheumatoid arthritis. *Arthritis Res Ther* 5(3): 105–15.
4. Ponta H et al. (2003) CD44: from adhesion molecules to signalling regulators. *Nat Rev Mol Cell Biol* 4(1): 33–45.
5. Cuff CA et al. (2001) The adhesion receptor CD44 promotes atherosclerosis by mediating inflammatory cell recruitment and vascular cell activation. *J Clin Invest* 108(7): 1031–40. (IHC)
6. Katoh S et al. (1994) Characterization of soluble CD44 in the circulation of mice. Levels are affected by immune activity and tumor growth. *J Immunol* 153(8): 3440–9. (ELISA)
7. Camp RL et al. (1993) CD44 is necessary for optimal contact allergic responses but is not required for normal leukocyte extravasation. *J Exp Med* 178(2): 497–507. (Blocking, FA)
8. Picker LJ et al. (1989) Monoclonal antibodies against the CD44 [In(Lu)-related p80], and Pgp-1 antigens in man recognize the Hermes class of lymphocyte homing receptors. *J Immunol* 142(6): 2046–51.
9. Budd RC et al. (1987) Distinction of virgin and memory T lymphocytes. Stable acquisition of the Pgp-1 glycoprotein concomitant with antigenic stimulation. *J Immunol* 138(10): 3120–9. (IP)
10. Trowbridge IS et al. (1982) Biochemical characterization and cellular distribution of a polymorphic, murine cell-surface glycoprotein expressed on lymphoid tissues. *Immunogenetics* 15(3): 299–312. (FA, ICC, IF, IP)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com). While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.