

Datasheet: MCA4703F

BATCH NUMBER 158882

Description:	RAT ANTI MOUSE CD44:FITC
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	IM7
Isotype:	IgG2b
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/20

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Mouse

Species Cross Reactivity

Reacts with: Human, Baboon, Cynomolgus monkey, Rhesus Monkey, Horse, Bovine, Pig, Dog, Cat, Ferret

Based on sequence similarity, is expected to react with: Mustelid

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Dexamethasone-induced myeloid leukemia M1 cells.
External Database Links	<p>UniProt: P15379 Related reagents</p> <p>Entrez Gene: 12505 Cd44 Related reagents</p>
Synonyms	Ly-24
Specificity	<p>Rat anti Mouse CD44 antibody, clone IM7 recognizes CD44, also known as H-CAM, HUTCH and lymphocyte antigen 24 (Ly-24).</p> <p>CD44 is a cell surface receptor for hyaluronic acid, although it can also interact with other ligands such as collagens and matrix metalloproteinases. This protein plays a role in a variety of cellular functions, such as adhesion, lymphocyte activation and lymph node homing. It is also involved in cell migration and plays a role in tumor metastasis. CD44 has many distinct isoforms responsible for its functional diversity.</p> <p>Rat anti Mouse CD44 antibody, clone IM7 recognizes all isoforms of CD44 and has been reported to inhibit a delayed-type hypersensitivity response <i>in vivo</i> and to induce complement-mediated cytotoxicity.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Camp, R.L. <i>et al.</i> (1993) CD44 is necessary for optimal contact allergic responses but is not required for normal leukocyte extravasation. J Exp Med. 178: 497-507. 2. Brocke, S. <i>et al.</i> (1999) Antibodies to CD44 and integrin alpha4, but not L-selectin, prevent central nervous system inflammation and experimental encephalomyelitis by blocking secondary leukocyte recruitment. Proc Natl Acad Sci U S A. 96: 6896-901. 3. Lesley, J. <i>et al.</i> (1992) Requirements for hyaluronic acid binding by CD44: a role for the cytoplasmic domain and activation by antibody. J Exp Med. 175: 257-66. 4. Katoh, S. <i>et al.</i> (2003) A role for CD44 in an antigen-induced murine model of pulmonary eosinophilia. J Clin Invest. 111: 1563-70. 5. Lesley, J. <i>et al.</i> (2003) Hyaluronan binding by cell surface CD44. J Biol Chem. 275: 26967-75. 6. Morrison, H. <i>et al.</i> (2001) The NF2 tumor suppressor gene product, merlin, mediates contact inhibition of growth through interactions with CD44. Genes Dev. 15: 968-80. 7. Martín-Villar, E. <i>et al.</i> (2010) Podoplanin associates with CD44 to promote directional

cell migration. [Mol Biol Cell. 21: 4387-99.](#)

8. Ariyoshi, W. *et al.* (2010) Internalization of aggrecan G1 domain neoepitope ITEGE in chondrocytes requires CD44. [J Biol Chem. 285: 36216-24.](#)

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Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA4703F>
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Regulatory

For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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