

Datasheet: MCA4703F

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|----------------------|--------------------------|
| 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 | <0.1% 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. 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. 2. 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. 3. 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. 4. 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. 5. Mckallip, R.J. <i>et al.</i> (2002) Role of CD44 in activation-induced cell death: CD44-deficient mice exhibit enhanced T cell response to conventional and superantigens. Int Immunol. 14 (9): 1015-26. 6. Lesley, J. <i>et al.</i> (2003) Hyaluronan binding by cell surface CD44. J Biol Chem. 275: 26967-75. 7. Kato, 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.](#)
8. Rutigliano, J.A. *et al.* (2008) Screening monoclonal antibodies for cross-reactivity in the ferret model of influenza infection. [J Immunol Methods. 336: 71-7.](#)
9. Ariyoshi, W. *et al.* (2010) Internalization of aggrecan G1 domain neoepitope ITEGE in chondrocytes requires CD44. [J Biol Chem. 285: 36216-24.](#)
10. Martín-Villar, E. *et al.* (2010) Podoplanin associates with CD44 to promote directional cell migration. [Mol Biol Cell. 21: 4387-99.](#)
11. Hartley, A.N. & Tarleton, R.L. (2015) Chemokine receptor 7 (CCR7)-expression and IFN γ production define vaccine-specific canine T-cell subsets. [Vet Immunol Immunopathol. 164 \(3-4\): 127-36.](#)
12. Zhu, C. *et al.* (2020) Antinociceptive effect of intrathecal injection of miR-9-5p modified mouse bone marrow mesenchymal stem cells on a mouse model of bone cancer pain. [J Neuroinflammation. 17 \(1\): 85.](#)
13. Lara, M.L. *et al.* (2023) Influence of culture conditions on the secretome of mesenchymal stem cells derived from feline adipose tissue: Proteomics approach. [Biochimie. 211: 78-86.](#)
14. Maeda, S. *et al.* (2021) NAFLD exacerbates cholangitis and promotes cholangiocellular carcinoma in mice. [Cancer Sci. 112 \(4\): 1471-80.](#)

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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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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