

Datasheet: MCA4703

Description:	RAT ANTI MOUSE CD44
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IM7
Isotype:	IgG2b
Quantity:	0.25 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 - 1/50
Immunohistology - Frozen	■			
Immunohistology - Paraffin	■			
ELISA	■			
Immunoprecipitation	■			
Western Blotting			■	
Functional Assays	■			

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.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein	IgG concentration 0.5mg/ml

Concentrations

Immunogen	Dexamethasone-induced myeloid leukemia M1 cells.
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External Database Links

UniProt:

[P15379](#)

[Related reagents](#)

Entrez Gene:

[12505](#)

Cd44

[Related reagents](#)

Synonyms

Ly-24

Specificity

Rat anti Mouse CD44 antibody, clone IM7 recognizes CD44, also known as H-CAM, HUTCH and lymphocyte antigen 24 (Ly-24).

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.

Rat anti Mouse CD44 antibody, clone IM7 recognizes all isoforms of CD44 and has been reported to inhibit a delayed-type hypersensitivity response *in vivo* and to induce complement-mediated cytotoxicity.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Camp, R.L. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (2003) A role for CD44 in an antigen-induced murine model of pulmonary eosinophilia. [J Clin Invest. 111: 1563-70.](#)
5. Lesley, J. *et al.* (2003) Hyaluronan binding by cell surface CD44. [J Biol Chem. 275: 26967-75.](#)
6. Morrison, H. *et al.* (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. *et al.* (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.](#)
9. 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.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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Printed on 01 Aug 2018