

Datasheet: MCA89

Description:	cription: MOUSE ANTI HUMAN CD44	
Specificity:	CD44	
Other names:	H-CAM, PGP-1	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	F10-44-2	
Isotype:	lgG2a	
Quantity:	0.2 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	•			1/10 - 1/20
Immunohistology - Frozen	•			
Immunohistology - Paraffin	•			1/50 - 1/100
ELISA			•	
Immunoprecipitation				
Western Blotting			•	
Immunofluorescence	•			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human
Species Cross Reactivity	Reacts with: Cynomolgus monkey 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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1mg/ml
Immunogen	Human T lymphocytes.
External Database Links	UniProt: P16070 Related reagents Entrez Gene: 960 CD44 Related reagents
Synonyms	LHR, MDU2, MDU3, MIC4
RRID	AB_871977
Fusion Partners	Spleen cells of immunised BALB/c mice were fused with cells from the mouse NS1 myeloma line.
Specificity	Mouse anti Human CD44 antibody, clone F10-44-2 recognizes human CD44, also known as Epican, HCAM, Phagocytic Glycoprotein 1 (PGP-1) or Hyaluronate receptor . Human CD44 is a single pass, type I transmembrane glycoprotein of variable molecular weight ranging from ~90kDa to ~220kDa depending on alternate splicing of the variable region exons and on the degree of glycosylation. CD44 is expressed on multiple cell types and is involved in multiple functions including cell-cell interactions and cell-extracellular matrix binding. Hyaluronan, a high molecular weight polysaccharide component of the extracellular matrix acts as the principal ligand for the CD44 receptor (Laurent and Fraser 1992).
	CD44 isoforms containing one or more sequences encoded by the variant region exons have a much more restricted expression pattern both in terms of organ specificity and immune activation (Mackay et al. 1994).
	Mouse anti Human CD44 antibody, clone F10-44-2 recognizes an epitope on human CD44 outside the regions coded for by the variable region exons and is thus expected to recognize all isoforms of human CD44 (Mackay et al. 1994).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Histology Positive	Human Tonsil

References

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- 2. Daar, A.S. & Fabre, J.W. (1981) Demonstration with monoclonal antibodies of an unusual mononuclear cell infiltrate and loss of normal epithelial membrane antigens in human breast carcinomas. Lancet. 2 (8244): 434-8.
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- 8. Sundström, M. (2003) Functional and phenotypic studies of two variants of a human mast cell line with a distinct set of mutations in the c-kit proto-oncogene. <u>Immunology</u>. 108: 89-97.
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- 14. Horwitz, K.B. *et al.* (2008) Rare steroid receptor-negative basal-like tumorigenic cells in luminal subtype human breast cancer xenografts. <u>Proc Natl Acad Sci U S A. 105:</u> 5774-9.
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 23. Xu, L. *et al.* (2017) Umbilical cord-derived mesenchymal stem cells on scaffolds facilitate collagen degradation via upregulation of MMP-9 in rat uterine scars. <u>Stem Cell</u>
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Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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/MCA89 10040		
Regulatory	For research purposes only		

Res Ther. 8 (1): 84.

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

Goat Anti Mouse IgG (STAR76...)

RPE

Goat Anti Mouse IgG (STAR70...)

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M434282:250203'

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