

Datasheet: MCA89A647

Description:	MOUSE ANTI HUMAN CD44:Alexa Fluor® 647		
Specificity:	CD44		
Other names:	H-CAM, PGP-1		
Format:	ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	F10-44-2		
Isotype:	lgG2a		
Quantity:	100 TESTS/1ml		

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat - 1/10

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	Reacts with: Cynor	molgus monkey		
Reactivity	<b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications of personal communications from the originators. Please refer to references indicated further information.			
Product Form	Purified IgG conjug	gated to Alexa Fluor® 64	7 - liquid	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	Alexa Fluor®647	650	665	
Preparation	Purified IgG prepar supernatant	ed by affinity chromatog	raphy on Protein A from	n tissue culture
Buffer Solution	Phosphate buffered			

Preservative Stabilisers	<ul><li>0.09% Sodium Azide</li><li>1% Bovine Serum Albumin</li></ul>			
Approx. Protein Concentrations	IgG concentration 0.05 mg/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_324797			
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 <sup>6</sup> cells in 100ul.			
References	Dalchau, R. et al. (1980) Monoclonal antibody to a human brain-granulocyte-T lymphocyte antigen probably homologous to the W 3/13 antigen of the rat. <u>Eur J Immunol.</u> 10 (10): 745-9.      Daar A.S. & Fabre, J.W. (1981) Demonstration with monoclonal antibodies of an			

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Cell Products from Single Colony Forming Unit-Derived Colonies Based on the Subfractionation Culturing Method. <u>Tissue Eng Part C Methods</u>. <u>21 (12): 1251-62</u>. 22. Lee, H.J. *et al.* (2017) ICOSL expression in human bone marrow-derived mesenchymal stem cells promotes induction of regulatory T cells. <u>Sci Rep. 7: 44486</u>. 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 Res Ther</u>. 8 (1): 84.

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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

# Acknowledgements

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# Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA89A647">https://www.bio-rad-antibodies.com/SDS/MCA89A647</a> 10041

#### Regulatory

For research purposes only

# **Related Products**

# **Recommended Negative Controls**

MOUSE IgG2a NEGATIVE CONTROL: Alexa Fluor® 647 (MCA929A647)

# **Recommended Useful Reagents**

<u>HUMAN SEROBLOCK (BUF070A)</u> <u>HUMAN SEROBLOCK (BUF070B)</u>

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

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 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 'M429715:240416'

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