Datasheet: MCA89FT

Description:	MOUSE ANTI HUMAN CD44:FITC
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	F10-44-2
Isotype:	IgG2a
Quantity:	25 µg

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	▪			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 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 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 on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 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_2076574
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.
References	1. 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. Eur J Immunol. 10 (10): 745-9. 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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20. Yin, S. *et al.* (2010) Chondrogenic transdifferentiation of human dermal fibroblasts stimulated with cartilage-derived morphogenetic protein 1. Tissue Eng Part A. 16: 1633-43.
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Cell Products from Single Colony Forming Unit-Derived Colonies Based on the Subfractionation Culturing Method. Tissue Eng Part C Methods. 21 (12): 1251-62.
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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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA89FT 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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