Datasheet: MCA2141FT

BATCH NUMBER 170729

Description:	MOUSE ANTI HUMAN CD146:FITC
Specificity:	CD146
Other names:	MUC18
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	OJ79c
Isotype:	IgG1
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 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

Human

Species Cross Reactivity

Reacts with: Pig, Dog

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 A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Recombinant human MUC18 (D1-D5) Fc protein.
External Database Links	**UniProt:** P43121 Related reagents **Entrez Gene:** 4162 MCAM Related reagents
Synonyms	MUC18
RRID	AB_2143381
Fusion Partners	Spleen cells from immunized mice were fused with cells of the mouse Sp2/0 Ag.14 myeloma cell line.
Specificity	**Mouse anti Human CD146 antibody, clone OJ79c** recognizes human Cell surface glycoprotein MUC18, also known as CD146, Cell surface glycoprotein P1H12, Melanoma cell adhesion molecule (MCAM) or S-endo 1 endothelial-associated antigen. CD146 is a 646 amino acid single pass type 1 transmembrane glycoprotein with a calculated molecular mass of ~72 kDa. However due to extensive N-linked glycosylation CD146 migrates in polyacrylamide gels with an apparent molecular mass of ~118 kDa. CD146 is a member of the immunoglobulin superfamily bearing 2 V-type Ig-like and 3 C-type Ig-like domains. CD146 is expressed by all endothelial cells and by melanoma cells and appears to act as an adhesion molecule (UniProt: P43121). Expression in melanoma may be linked to tumor progression (Lehmann *et al.* 1989). Mouse anti Human CD146 antibody, clone OJ79c is highly expressed on pericytes and has been utilized for the identification of perivascular mesenchymal precursor cells from cardiac muscle using flow cytometry (Chen *et al.* 2014).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. PLoS One. 7: e35577. 2. Crisan, M. *et al.* (2008) A perivascular origin for mesenchymal stem cells in multiple human organs. Cell Stem Cell. 3: 301-13. 3. Iohara, K. *et al.* (2008) A novel stem cell source for vasculogenesis in ischemia: subfraction of side population cells from dental pulp. Stem Cells. 26 (9): 2408-18. 4. Park, T.S. *et al.* (2010) Placental Perivascular Cells for Human Muscle Regeneration. Stem Cells Dev. 20: 451-63.

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Further Reading

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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/MCA2141FT
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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

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