

Datasheet: MCA2141

BATCH NUMBER 158676

Description:	MOUSE ANTI HUMAN CD146
Specificity:	CD146
Other names:	MUC18
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OJ79c
Isotype:	IgG1
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 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
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. 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: 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 - 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 (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 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_324068

Fusion Partners Spleen cells from immunised 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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

Histology Positive Control Tissue Melanoma

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.](#)
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 4. Park, T.S. *et al.* (2010) Placental Perivascular Cells for Human Muscle Regeneration. [Stem Cells Dev. 20: 451-63.](#)
 5. Smith, K. *et al.* (2011) Mono- and tri-cationic porphyrin-monoclonal antibody conjugates: photodynamic activity and mechanism of action. [Immunology. 132: 256-65.](#)
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 14. Meireles, A.L. *et al.* (2011) Increased levels of circulating endothelial progenitor cells in human T-cell lymphotropic virus type I carriers. [Arch Med Res. 42: 34-7.](#)
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circulating microparticles and their relationship to lung and skin involvement in systemic sclerosis. [BMC Musculoskelet Disord. 16: 191.](#)

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Further Reading

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2. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2141 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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Printed on 17 Apr 2024