

## Datasheet: MCA2141

**BATCH NUMBER 0114R**

<b>Description:</b>	MOUSE ANTI HUMAN CD146
<b>Specificity:</b>	CD146
<b>Other names:</b>	MUC18
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OJ79c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** 0.09% Sodium Azide (NaN<sub>3</sub>)

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1.0 mg/ml

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**Immunogen** Recombinant human MUC18 (D1-D5) Fc protein.

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**External Database Links**

**UniProt:**

[P43121](#) [Related reagents](#)

**Entrez Gene:**

[4162](#) MCAM [Related reagents](#)

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**Synonyms** MUC18

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**RRID** AB\_324068

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**Fusion Partners** Spleen cells from immunised mice were fused with cells of the mouse Sp2/0 Ag.14 myeloma cell line.

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**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](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**Histology Positive Control Tissue** Melanoma

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**References** 1. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular

- mesenchymal stem cells. [PLoS One. 7: e35577.](#)
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**Further Reading**

1. Kuzu, I. *et al.* (1993) Expression of adhesion molecules on the endothelium of normal tissue vessels and vascular tumors. [Lab Invest. 69 \(3\): 322-8.](#)
2. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**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

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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