

## Datasheet: MCA2141F

**BATCH NUMBER 1708**

<b>Description:</b>	MOUSE ANTI HUMAN CD146:FITC
<b>Specificity:</b>	CD146
<b>Other names:</b>	MUC18
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OJ79c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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	▪			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. 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 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

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Recombinant human MUC18 (D1-D5) Fc protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P43121</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4162</a>    MCAM    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MUC18
<b>RRID</b>	AB_324069
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse Sp2/0 Ag.14 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD146 antibody, clone OJ79c</b> 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 <a href="#">V-type Ig-like</a> and 3 <a href="#">C-type Ig-like domains</a>. CD146 is expressed by all endothelial cells and by melanoma cells and appears to act as an adhesion molecule (<a href="#">UniProt: P43121</a>). Expression in melanoma may be linked to tumor progression (<a href="#">Lehmann et al. 1989</a>).</p> <p>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 (<a href="#">Chen et al. 2014</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. <a href="#">PLoS One. 7: e35577.</a></li> <li>Crisan, M. <i>et al.</i> (2008) A perivascular origin for mesenchymal stem cells in multiple human organs. <a href="#">Cell Stem Cell. 3: 301-13.</a></li> <li>Iohara, K. <i>et al.</i> (2008) A novel stem cell source for vasculogenesis in ischemia: subfraction of side population cells from dental pulp. <a href="#">Stem Cells. 26 (9): 2408-18.</a></li> <li>Park, T.S. <i>et al.</i> (2010) Placental Perivascular Cells for Human Muscle Regeneration. <a href="#">Stem Cells Dev. 20: 451-63.</a></li> <li>Smith, K. <i>et al.</i> (2011) Mono- and tri-cationic porphyrin-monoclonal antibody conjugates:</li> </ol>

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<b>Further Reading</b>	<p>1. Kuzu, I. <i>et al.</i> (1993) Expression of adhesion molecules on the endothelium of normal tissue vessels and vascular tumors. <a href="#">Lab Invest. 69 (3): 322-8.</a></p> <p>2. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a></p>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2141F">https://www.bio-rad-antibodies.com/SDS/MCA2141F</a></p> <p>10041</p>
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<b>Regulatory</b>	For research purposes only
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## Related Products

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

## Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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