

# Datasheet: MCA1926A488T

**BATCH NUMBER 158674**

<b>Description:</b>	MOUSE ANTI HUMAN CD166:Alexa Fluor® 488
<b>Specificity:</b>	CD166
<b>Other names:</b>	ALCAM
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	3A6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 TESTS/0.25ml

## 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

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: Sheep <b>N.B.</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 Alexa Fluor® 488 - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>Alexa Fluor®488</td><td>495</td><td>519</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
Alexa Fluor®488	495	519							
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 0.05 mg/ml
<b>Immunogen</b>	Human thymic epithelial cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q13740</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">214</a>    ALCAM    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MEMD
<b>RRID</b>	AB_2223889
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the P3X63 Ag8 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD166 antibody, clone 3A6</b> recognizes the 100 kDa adhesion molecule CD166, also known as ALCAM. CD166 is a member of the Ig superfamily and is expressed on activated T-cells, B cells and other cells including thymic epithelial cells, fibroblasts, keratinocytes and neurons. CD6 has been identified as a receptor for ALCAM (<a href="#">Skonier <i>et al.</i> 1996</a>).</p> <p>Mouse anti Human CD166 antibody, clone 3A6 is reported to cross-react with CD166 on ovine tissues and provides a useful tool for the identification and characterization of ovine mesenchymal stem cells in conjunction with <a href="#">CD44</a> which is expressed by this cell lineage and the hematopoietic cell marker <a href="#">CD45</a> which is not expressed on mesenchymal stem cells (<a href="#">Sanjurjo-Rodríguez <i>et al.</i> 2017</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>1. Yeh, S.P. <i>et al.</i> (2005) Mesenchymal stem cells can be easily isolated from bone marrow of patients with various haematological malignancies but the surface antigens expression may be changed after prolonged <i>ex vivo</i> culture. <a href="#">Leukemia. 19: 1505-7.</a></li> <li>2. Patel, D. D. <i>et al.</i> (1997) CD166 Workshop: Tissue distribution and functional analysis of antibodies reactive for CD166, a ligand for CD6. In Leukocyte Typing IV. Kishimoto, T. <i>et al.</i> eds Garland publishing Inc. New York p. 461-4.</li> <li>3. Tondreau, T. <i>et al.</i> (2008) Gene expression pattern of functional neuronal cells derived from human bone marrow mesenchymal stromal cells. <a href="#">BMC Genomics. 9:166.</a></li> <li>4. Wang, D. <i>et al.</i> (2004) Proteomic profiling of bone marrow mesenchymal stem cells upon transforming growth factor beta1 stimulation. <a href="#">J Biol Chem. 279 (42): 43725-34.</a></li> <li>5. Green, L.R. <i>et al.</i> (2011) Cooperative role for tetraspanins in adhesion-mediated attachment of bacterial species to human epithelial cells. <a href="#">Infect Immun. 79 (6): 2241-9.</a></li> </ol>

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13. Fridriksdottir, A.J. *et al.* (2015) Propagation of oestrogen receptor-positive and oestrogen-responsive normal human breast cells in culture. [Nat Commun. 6: 8786.](#)
14. Brune, J.C. *et al.* (2011) Mesenchymal stromal cells from primary osteosarcoma are non-malignant and strikingly similar to their bone marrow counterparts. [Int J Cancer. 129 \(2\): 319-30.](#)
15. Chen, F. *et al.* (2018) Bone morphogenetic protein 7-transduced human dermal-derived fibroblast cells differentiate into osteoblasts and form bone *in vivo*. [Connect Tissue Res. 59 \(3\): 223-232.](#)
16. Juan, C.H. *et al.* (2020) *In Vitro* Differentiation of Human Placenta-Derived Multipotent Cells into Schwann-Like Cells. [Biomolecules. 10 \(12\) Dec 10 \[Epub ahead of print\].](#)

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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.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1926A488T">https://www.bio-rad-antibodies.com/SDS/MCA1926A488T</a> 10041
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

### Recommended Useful Reagents

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

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

<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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'M384992:210513'

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