

# Datasheet: MCA1926A647T

Description:	MOUSE ANTI HUMAN CD166:Alexa Fluor® 647		
Specificity:	CD166		
Other names:	ALCAM		
Format:	ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	3A6		
Isotype:	lgG1		
Quantity:	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 <u>www.bio-rad-antibodies.com/protocols</u> .			
			No Not Determined	Suggested Dilution
	Flow Cytometry	•		Neat - 1/5
		is not been test	ed for use in a particular te	chnique 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: 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® 647 - liquid			
Max Ex/Em	Fluorophore	Excitation Max	(nm) Emission Max (nm)	
	Alexa Fluor®647	650	665	-
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant			
Buffer Solution	Phosphate buffered sa	aline		

Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin			
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml			
Immunogen	Human thymic epithelial cells.			
External Database Links	UniProt:         Q13740       Related reagents         Entrez Gene:         214       ALCAM       Related reagents			
Synonyms	MEMD			
RRID	AB_1100882			
Fusion Partners	Spleen cells from immunized mice were fused with cells of the P3X63 Ag8 myeloma cell line.			
Specificity	<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 ( <u>Skonier <i>et al.</i> 1996</u> ).			
	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 <u>CD44</u> which is expressed by this cell lineage and the hematopoietic cell marker <u>CD45</u> which is not expressed on mesenchymal stem cells ( <u>Sanjurjo-Rodríguez <i>et al.</i> 2017</u> ).			
Flow Cytometry	Use 10µl of the suggested working dilution to label $10^6$ cells in $100µl$			
References	<ol> <li>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>Wang, D. <i>et al.</i> (2004) Proteomic profiling of bone marrow mesenchymal stem cells upon transforming growth factor beta1 stimulation. J Biol Chem. 279 (42): 43725-34.</li> <li>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. Leukemia. 19: 1505-7.</li> <li>Tondreau, T. <i>et al.</i> (2008) Gene expression pattern of functional neuronal cells derived from human bone marrow mesenchymal stromal cells. BMC Genomics. 9:166.</li> <li>Srouji, S. <i>et al.</i> (2009) The Schneiderian membrane contains osteoprogenitor cells: <i>in vivo</i> and <i>in vitro</i> study. Calcif Tissue Int. 84 (2): 138-45.</li> </ol>			

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	pulp. <u>Clin Transplant. 24: E23-8.</u>
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	five-thousand cancer specific protein clusters and their subcellular annotation by using a
	three symbol code. <u>J Proteome Res. 9: 6112-25.</u>
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	from a hypophosphatasia patient. <u>Gene Ther. 17 (4): 494-502.</u>
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	non-malignant and strikingly similar to their bone marrow counterparts. Int J Cancer. 129
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	Jelly Mesenchymal Stromal Cells Mediates Changes in the Expression Profile of
	Stemness Markers. PLoS One. 10 (4): e0122465.
	12. Fridriksdottir, A.J. <i>et al.</i> (2015) Propagation of oestrogen receptor-positive and
	oestrogen-responsive normal human breast cells in culture. Nat Commun. 6: 8786.
	13. Holmannova, D. <i>et al.</i> (2017) Effects of conventional CPB and mini-CPB on
	neutrophils CD162, CD166 and CD195 expression. Perfusion. 32 (2): 141-50.
	14. Prins, H.J. <i>et al.</i> (2016) Bone Regeneration Using the Freshly Isolated Autologous
	Stromal Vascular Fraction of Adipose Tissue in Combination With Calcium Phosphate
	Ceramics. <u>Stem Cells Transl Med. 5 (10): 1362-1374.</u>
	15. Chen, F. <i>et al.</i> (2018) Bone morphogenetic protein 7-transduced human dermal-
	derived fibroblast cells differentiate into osteoblasts and form bone <i>in vivo</i> . <u>Connect Tissue</u>
	Res. 59 (3): 223-232.
	16. Juan, C.H. <i>et al.</i> (2020) <i>In Vitro</i> Differentiation of Human Placenta-Derived Multipotent
	Cells into Schwann-Like Cells. Biomolecules. 10 (12) Dec 10 [Epub ahead of print].
	17. Hidalgo, L. <i>et al.</i> (2023) Switchable CAR T cell strategy against osteosarcoma. <u>Cancer</u>
	Immunol Immunother. 72 (8): 2623-33.
	18. Kohler, K.T. <i>et al.</i> (2024) Oncogene activated human breast luminal progenitors
	contribute basally located myoepithelial cells. Breast Cancer Res. 26 (1): 183.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at
Storage	
	-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.
Guarantaa	10 months from data of doorstal
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies
	Corporation. The transfer of this product is contingent on the buyer using the purchase
	product solely in research, excluding contract research or any fee for service research,
	and the buyer must not sell or otherwise transfer this product or its components for (a)
	diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening

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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1926A647T 10041		
Regulatory	For research purposes only		

## Related Products

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M437850:250319'

#### Printed on 19 Mar 2025

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