

Datasheet: MCA1926FT

Description:	MOUSE ANTI HUMAN CD166:FITC
Specificity:	CD166
Other names:	ALCAM
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	3A6
Isotype:	lgG1
Quantity:	25 μg

### **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat

Where this product has not been tested for use in a particular technique 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	Reacts with: Shee	p		
Reactivity	reactivity is derived	ctivity and working conditi d from testing within our l cations from the originato	aboratories, peer-re	eviewed publications or
Product Form	Purified IgG conjug	gated to Fluorescein Isoth	niocyanate Isomer 1	l (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	)
	FITC	490	525	
Preparation	Purified IgG prepa supernatant	red by affinity chromatog	raphy on Protein A	from tissue culture
Buffer Solution	Phosphate buffere	d saline		

Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin	
Approx. Protein Concentrations	IgG concentration 0.1mg/ml	
Immunogen	Human thymic epithelial cells.	
External Database Links	UniProt:  Q13740 Related reagents  Entrez Gene:  214 ALCAM Related reagents	
Synonyms	MEMD	
RRID	AB_2223888	
Fusion Partners	Spleen cells from immunized mice were fused with cells of the P3X63 Ag8 my line.	yeloma cell
Specificity	Mouse anti Human CD166 antibody, clone 3A6 recognizes the 100 kDa ad molecule CD166, also known as ALCAM. CD166 is a member of the Ig super expressed on activated T-cells, B cells and other cells including thymic epithe fibroblasts, keratinocytes and neurons. CD6 has been identified as a receptor (Skonier et al. 1996).	family and is lial cells,
	Mouse anti Human CD166 antibody, clone 3A6 is reported to cross-react with ovine tissues and provides a useful tool for the identification and characterizal mesenchymal stem cells in conjunction with CD44 which is expressed by this and the hematopoietic cell marker CD45 which is not expressed on mesenchycells (Sanjurjo-Rodríguez et al. 2017).	tion of ovine cell lineage
Flow Cytometry	Use 10μl of the suggested working dilution to label 10 <sup>6</sup> cells in 100μl	
References	1. Patel, D. D. <i>et al.</i> (1997) CD166 Workshop: Tissue distribution and function of antibodies reactive for CD166, a ligand for CD6. In Leukocyte Typing IV. Ki <i>et al.</i> eds Garland publishing Inc. New York p. 461-4.  2. Wang, D. <i>et al.</i> (2004) Proteomic profiling of bone marrow mesenchymal st upon transforming growth factor beta1 stimulation. J Biol Chem. 279 (42): 4373. Yeh, S.P. <i>et al.</i> (2005) Mesenchymal stem cells can be easily isolated from marrow of patients with various haematological malignancies but the surface expression may be changed after prolonged <i>ex vivo</i> culture. Leukemia. 19: 1544. Tondreau, T. <i>et al.</i> (2008) Gene expression pattern of functional neuronal confrom human bone marrow mesenchymal stromal cells. BMC Genomics. 9:16655. Srouji, S. <i>et al.</i> (2009) The Schneiderian membrane contains osteoprogenital vivo and <i>in vitro</i> study. Calcif Tissue Int. 84 (2): 138-45.	tem cells 725-34. bone antigens 505-7. ells derived

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- 7. Bhattacharya, S. *et al.* (2010) Toponome imaging system: in situ protein network mapping in normal and cancerous colon from the same patient reveals more than five-thousand cancer specific protein clusters and their subcellular annotation by using a three symbol code. J Proteome Res. 9: 6112-25.
- 8. Katsube, Y. *et al.* (2010) Restoration of cellular function of mesenchymal stem cells from a hypophosphatasia patient. <u>Gene Ther. 17 (4): 494-502.</u>
- 9. Brune, J.C. *et al.* (2011) Mesenchymal stromal cells from primary osteosarcoma are non-malignant and strikingly similar to their bone marrow counterparts. <u>Int J Cancer. 129</u> (2): 319-30.
- 10. Green, L.R. *et al.* (2011) Cooperative role for tetraspanins in adhesin-mediated attachment of bacterial species to human epithelial cells. <u>Infect Immun. 79 (6): 2241-9.</u>
- 11. Ali, H. *et al.* (2015) Multi-Lineage Differentiation of Human Umbilical Cord Wharton's Jelly Mesenchymal Stromal Cells Mediates Changes in the Expression Profile of Stemness Markers. PLoS One. 10 (4): e0122465.
- 12. Fridriksdottir, A.J. *et al.* (2015) Propagation of oestrogen receptor-positive and oestrogen-responsive normal human breast cells in culture. <u>Nat Commun. 6: 8786.</u>
- 13. Holmannova, D. *et al.* (2017) Effects of conventional CPB and mini-CPB on neutrophils CD162, CD166 and CD195 expression. Perfusion. 32 (2): 141-50.
- 14. Prins, H.J. *et al.* (2016) Bone Regeneration Using the Freshly Isolated Autologous Stromal Vascular Fraction of Adipose Tissue in Combination With Calcium Phosphate Ceramics. Stem Cells Transl Med. 5 (10): 1362-1374.
- 15. Chen, F. *et al.* (2018) Bone morphogenetic protein 7-transduced human dermalderived 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. <u>Biomolecules</u>. 10 (12) <u>Dec 10 [Epub ahead of print]</u>.
- 17. Hidalgo, L. *et al.* (2023) Switchable CAR T cell strategy against osteosarcoma. <u>Cancer Immunol Immunother</u>. 72 (8): 2623-33.
- 18. Kohler, K.T. *et al.* (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 -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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1926FT">https://www.bio-rad-antibodies.com/SDS/MCA1926FT</a> 10041
Regulatory	For research purposes only

# **Related Products**

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

## **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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M437853:250319'

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