

Datasheet: MCA1926PE

Description:	MOUSE ANTI HUMAN CD166:RPE
Specificity:	CD166
Other names:	ALCAM
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	3A6
Isotype:	IgG1
Quantity:	100 TESTS

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			

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: Sheep			
Reactivity	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 conjuga	ated to R. Phycoerythrin	(RPE) - lyophilized	
Reconstitution	Reconstitute with 1.0	0 ml distilled water		
	Care should be take	n during reconstitution	as the protein may app	pear as a film at the
	bottom of the vial. B	io-Rad recommend that	the vial is gently mixe	ed after reconstitution.
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	RPE 488nm laser	496	578	

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN₃)1% bovine serum albumin5% sucrose
Immunogen	Human thymic epithelial cells.
External Database Links	UniProt: Q13740 Related reagents
	Entrez Gene: 214 ALCAM Related reagents
Synonyms	MEMD
Fusion Partners	Spleen cells from immunised mice were fused with cells of the P3X63 Ag8 myeloma cell line.
Specificity	Mouse anti Human CD166 antibody, clone 3A6 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 (Skonier et al. 1996).
	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 CD44 which is expressed by this cell lineage and the hematopoietic cell marker CD45 which is not expressed on mesenchymal stem cells (Sanjurjo-Rodríguez et al. 2017).
Flow Cytometry	Use 10μl of the suggested working dilution to label 10 ⁶ cells in 100μl
References	 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. 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. 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. 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.

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vivo and in vitro study. Calcif Tissue Int. 84 (2): 138-45.

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- 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>
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- 15. Chen, F. *et al.* (2018) Bone morphogenetic protein 7-transduced human dermal-derived fibroblast cells differentiate into osteoblasts and form bone *in vivo*. <u>Connect Tissue</u> 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].

Storage

Store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1926PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

Recommended Useful Reagents

<u>HUMAN SEROBLOCK (BUF070A)</u> <u>HUMAN SEROBLOCK (BUF070B)</u>

 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
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M419297:230616'

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