

Datasheet: MCA1926FT

Description:	MOUSE ANTI HUMAN CD166:FITC
Specificity:	CD166
Other names:	ALCAM
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	3A6
Isotype:	IgG1
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 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. Suggested working dilutions are given as a guide only. 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 N.B. Antibody reactivity and working conditions may vary between species.		
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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
	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

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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Yeh, S.P. *et al.* (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 *ex vivo* culture. [Leukemia. 19: 1505-7.](#)
2. Patel, D. D. *et al.* (1997) CD166 Workshop: Tissue distribution and functional analysis of antibodies reactive for CD166, a ligand for CD6. In Leukocyte Typing IV. Kishimoto, T. *et al.* eds Garland publishing Inc. New York p. 461-4.
3. Tondreau, T. *et al.* (2008) Gene expression pattern of functional neuronal cells derived from human bone marrow mesenchymal stromal cells. [BMC Genomics. 9:166.](#)
4. Wang, D. *et al.* (2004) Proteomic profiling of bone marrow mesenchymal stem cells upon transforming growth factor beta1 stimulation. [J Biol Chem. 279 \(42\): 43725-34.](#)
5. Green, L.R. *et al.* (2011) Cooperative role for tetraspanins in adhesin-mediated attachment of bacterial species to human epithelial cells. [Infect Immun. 79 \(6\): 2241-9.](#)
6. Agha-Hosseini, F. *et al.* (2010) *In vitro* isolation of stem cells derived from human dental pulp. [Clin Transplant. 24: E23-8.](#)
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. 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.](#)
9. Holmannova D *et al.* (2016) Effects of conventional CPB and mini-CPB on neutrophils CD162, CD166 and CD195 expression. [Perfusion. Sep 13. pii: 0267659116669586. \[Epub ahead of print\]](#)
10. 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.](#)
11. Srouji, S. *et al.* (2009) The Schneiderian membrane contains osteoprogenitor cells: *in vivo* and *in vitro* study. [Calcif Tissue Int. 84 \(2\): 138-45.](#)
12. Katsube, Y. *et al.* (2010) Restoration of cellular function of mesenchymal stem cells from a

hypophosphatasia patient. [Gene Ther. 17 \(4\): 494-502.](#)

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.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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