

# Datasheet: MCA469FT BATCH NUMBER 151243

Description:	MOUSE ANTI HUMAN CD9:FITC
Specificity:	CD9
Other names:	MRP-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MM2/57
Isotype:	lgG2b
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 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.

<b>Species Cross</b>
Reactivity

**Target Species** 

Human

Reacts with: Cat, Rhesus Monkey, Bovine, Dog, Rabbit, Horse, Pig, Mink, Llama, Ferret Based on sequence similarity, is expected to react with:Mustelid

**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 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 A from tissue culture supernatant.

Buffer Solution	Phosphate buffered saline	
Preservative	0.09% Sodium Azide	
Stabilisers		
	1% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml	
Concentrations		
Immunogen	Human platelet membranes	
External Database	Halbard.	
Links	UniProt:	
	P21926 Related reagents	
	Entrez Gene:	
	928 CD9 Related reagents	
Synonyms	MIC3, TSPAN29	
Cynonyms	MICS, TSPAINZ9	
RRID	AB_1102440	
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells from the SP2/0 mouse myeloma line	
Specificity	Mouse anti Human CD9 antibody, clone MM2/57 recognizes human leukocyte antigen MIC3 also known as MRP-1 or CD9. CD9 is a 228 amino acid multi pass membrane glycoprotein belonging to the tetraspanin family with a molecular weight of ~24 kDa expressed by platelets, monocytes, some lymphocytes and endothelial cells.	
	Mouse anti Human CD9 antibody, clone MM2/57 recognizes a conserved epitope on CD9 present on a wide range of mammalian species.	
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.	
References	<ol> <li>Boucheix, C. et al. (1991) Molecular cloning of the CD9 antigen. A new family of cell surface proteins. J Biol Chem. 266 (1): 117-22.</li> <li>Brodersen, R. et al. (1998) Analysis of the immunological cross reactivities of 213 well characterized monoclonal antibodies with specificities against various leucocyte surface antigens of human and 11 animal species. Vet Immunol Immunopathol. 64 (1): 1-13.</li> <li>Ibrahim,S. et al. (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes Vet.Immunol Immunopathol. 119: 63-80</li> <li>Jennings, L. K. et al. (1995) CD9 cluster workshop report: cell surface binding and functional analysis. In S.F. Sclossman. et al. Editors. 1995. Leucocyte Typing V. White Cell Differentiation Antigens. Oxford University Press, New York, NY. 1249-1251.</li> <li>Martel, C.J. &amp; Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. Vet Immunol Immunopathol. 132:109-15.</li> <li>Aasted, B. et al. (2007) Reactivity of monoclonal antibodies to human CD antigens with</li> </ol>	

- 7. Davis, W.C. *et al.* (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. Vet Immunol Immunopathol. 119: 123-30.
- 8. Ferrer, M. *et al.* (1998) Pattern of expression of tetraspanin antigen genes in Burkitt lymphoma cell lines. Clin Exp Immunol. 113: 346-52.
- 9. Kao, Y.R. *et al.* (2003) Tumor-associated antigen L6 and the invasion of human lung cancer cells. <u>Clin Cancer Res. 9: 2807-16.</u>
- 10. Müller, T. *et al.* (2009) A novel embryonic stem cell line derived from the common marmoset monkey (*Callithrix jacchus*) exhibiting germ cell-like characteristics. <u>Hum</u> Reprod. 24: 1359-72.
- 11. Kubota, H. *et al.* (2011) Glial cell line-derived neurotrophic factor and endothelial cells promote self-renewal of rabbit germ cells with spermatogonial stem cell properties. <u>FASEB</u> J. 25 (8): 2604-14.
- 12. Hogue, I.B. *et al.* (2011) Gag induces the coalescence of clustered lipid rafts and tetraspanin-enriched microdomains at HIV-1 assembly sites on the plasma membrane. <u>J Virol.</u> 85 (19): 9749-66.
- 13. Löffler, S. *et al.* (1997) CD9, a tetraspan transmembrane protein, renders cells susceptible to canine distemper virus. <u>J Virol. 71: 42-9.</u>
- 14. Meister, R.K. *et al.* (2007) Progress in the discovery and definition of monoclonal antibodies for use in feline research. <u>Vet Immunol Immunopathol.</u> 119: 38-46.
- 15. Bearden, R.N. *et al.* (2017) *In-vitro* characterization of canine multipotent stromal cells isolated from synovium, bone marrow, and adipose tissue: a donor-matched comparative study. Stem Cell Res Ther. 8 (1): 218.
- 16. Jackson, C.E. *et al.* (2017) Effects of Inhibiting VPS4 Support a General Role for ESCRTs in Extracellular Vesicle Biogenesis. <u>Biophys J. 113 (6): 1342-1352</u>.
- 17. Wąchalska, M. *et al.* (2020) Palmitoylated mNeonGreen Protein as a Tool for Visualization and Uptake Studies of Extracellular Vesicles Membranes. 10 (12): 373.

#### **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.

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/MCA469FT">https://www.bio-rad-antibodies.com/SDS/MCA469FT</a> 10041
Regulatory	For research purposes only

## Related Products

## **Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL:FITC (MCA691F)

## **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 'M367921:200529'

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