

Datasheet: MCA469PE

Description:	MOUSE ANTI HUMAN CD9:RPE
Specificity:	CD9
Other names:	MRP-1
Format:	RPE
Product Type:	Monoclonal Antibody
Product Type: Clone:	Monoclonal Antibody MM2/57
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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 - 1/2

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	Human				
Species Cross Reactivity	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.					
Product Form	Purified IgG conjugat	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1ml	Reconstitute with 1ml distilled water.				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	RPE 488nm laser	496	578			
Preparation	Purified IgG prepared	d by affinity chromatog	raphy on Protein A from	tissue culture supernata		
Buffer Solution	Phosphate buffered s	aline				
Preservative	0.09% Sodium Azide					
Stabilisers	1% Bovine Serum	Albumin				
	5% Sucrose					
Immunogen	Human platelet meml	branes				

External Database Links

UniProt:

P21926 Related reagents

Entrez Gene:

928 CD9 Related reagents

Synonyms

MIC3, TSPAN29

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 10⁶ cells or 100ul whole blood.

References

- 1. 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.
- 2. 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. <u>Vet Immunol Immunopathol. 64 (1): 1-13.</u>
- 3. Ibrahim,S. *et al.* (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes <u>Vet.Immunol Immunopathol. 119: 63-80</u>
- 4. 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.
- 5. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. <u>Vet Immunol Immunopathol</u>. 132:109-15.
- 6. Aasted, B. *et al.* (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119: 27-37.
- 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. <u>Vet Immunol Immunopathol. 119: 123-30.</u>
- 8. Ferrer, M. *et al.* (1998) Pattern of expression of tetraspanin antigen genes in Burkitt lymphoma cell lines. <u>Clin Exp Immunol</u>. 113: 346-52.
- 9. Kao, Y.R. *et al.* (2003) Tumor-associated antigen L6 and the invasion of human lung cancer cells. Clin Cancer Res. 9: 2807-16.
- 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 Reprod. 24: 1359-72.</u>
- 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 J. 25 (8):</u> 2604-14.
- 12. Hogue, I.B. *et al.* (2011) Gag induces the coalescence of clustered lipid rafts and tetraspaninenriched microdomains at HIV-1 assembly sites on the plasma membrane. <u>J Virol. 85 (19):</u> 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. Vet Immunol Immunopathol. 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. Biophys J. 113 (6): 1342-1352.

Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL:RPE (MCA691PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

America

North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 Worldwide

Tel: +44 (0)1865 852 700

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