

Datasheet: MCA469G

Description:	MOUSE ANTI HUMAN CD9
Specificity:	CD9
Other names:	MRP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MM2/57
Isotype:	IgG2b
Quantity:	0.2 mg

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	▪			1/100 - 1/200
Immunohistology - Frozen	▪			1/500 - 1/1000
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			

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: 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 - liquid

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)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Human platelet membranes

External Database Links

UniProt:

[P21926](#)

[Related reagents](#)

Entrez Gene:

[928](#)

CD9

[Related reagents](#)

Synonyms MIC3, TSPAN29

RRID AB_323961

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.

Clone MM2/57 has shown weak cross reactivity to porcine CD9 ([Milburn, et al. 2021](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood

References

1. Ed Knapp W. *et al.* (1989) Leucocyte Typing IV Oxford University Press.
2. 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.
3. Löffler, S. *et al.* (1997) CD9, a tetraspan transmembrane protein, renders cells susceptible to canine distemper virus. [J Virol. 71: 42-9.](#)
4. 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.](#)

5. Ferrer, M. *et al.* (1998) Pattern of expression of tetraspanin antigen genes in Burkitt lymphoma cell lines. [Clin Exp Immunol. 113: 346-52.](#)
6. Kao, Y.R. *et al.* (2003) Tumor-associated antigen L6 and the invasion of human lung cancer cells. [Clin Cancer Res. 9: 2807-16.](#)
7. Aasted, B. *et al.* (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. [Vet Immunol Immunopathol. 119: 27-37.](#)
8. 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.](#)
9. 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.](#)
10. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132:109-15.](#)
11. Müller, T. *et al.* (2009) A novel embryonic stem cell line derived from the common marmoset monkey (*Callithrix jacchus*) exhibiting germ cell-like characteristics. [Hum Reprod. 24: 1359-72.](#)
12. 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. [FASEB J. 25 \(8\): 2604-14.](#)
13. 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. [J Virol. 85 \(19\): 9749-66.](#)
14. Viswanathan, K. *et al.* (2017) Quantitative membrane proteomics reveals a role for tetraspanin enriched microdomains during entry of human cytomegalovirus. [PLoS One. 12 \(11\): e0187899.](#)
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.](#)
17. Fish, E.J. *et al.* (2018) Malignant canine mammary epithelial cells shed exosomes containing differentially expressed microRNA that regulate oncogenic networks. [BMC Cancer. 18 \(1\): 832.](#)
18. Wąchalska, M. *et al.* (2020) Palmitoylated mNeonGreen Protein as a Tool for Visualization and Uptake Studies of Extracellular Vesicles. [Membranes \(Basel\). 10 \(12\): 373.](#)
19. Fu, T.S. *et al.* (2023) Biomimetic vascularized adipose-derived mesenchymal stem cells bone-periosteum graft enhances angiogenesis and osteogenesis in a male rabbit spine fusion model. [Bone Joint Res. 12 \(12\): 722-33.](#)
20. Kwasnik, M. *et al.* (2023) Protein-Coding Region Derived Small RNA in Exosomes from Influenza A Virus-Infected Cells. [Int J Mol Sci. 24 \(1\): 867.](#)
21. Grabowska, K. *et al.* (2020) Alpha herpesvirus gB Homologs Are Targeted to Extracellular Vesicles, but They Differentially Affect MHC Class II Molecules. [Viruses. 12 \(4\): 429.](#)
22. Milburn, J.V. *et al.* (2021) Expression of CD9 on porcine lymphocytes and its relation to T cell differentiation and cytokine production. [Dev Comp Immunol. 121: 104080.](#)

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.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA469G 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M426473:240118'

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