

Datasheet: MCA469GT

BATCH NUMBER 161547

Description:	MOUSE ANTI HUMAN CD9
Specificity:	CD9
Other names:	MRP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MM2/57
Isotype:	IgG2b
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	▪			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 G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human platelet membranes
External Database Links	<p>UniProt: P21926 Related reagents</p> <p>Entrez Gene: 928 CD9 Related reagents</p>
Synonyms	MIC3, TSPAN29
RRID	AB_1102437
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells from the SP2/0 mouse myeloma line
Specificity	<p>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.</p> <p>Mouse anti Human CD9 antibody, clone MM2/57 recognizes a conserved epitope on CD9 present on a wide range of mammalian species.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	<ol style="list-style-type: none"> 1. Boucheix, C. <i>et al.</i> (1991) Molecular cloning of the CD9 antigen. A new family of cell surface proteins. J Biol Chem. 266 (1): 117-22. 2. Brodersen, R. <i>et al.</i> (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. 3. Ibrahim, S. <i>et al.</i> (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes Vet. Immunol Immunopathol. 119: 63-80 4. Jennings, L. K. <i>et al.</i> (1995) CD9 cluster workshop report: cell surface binding and functional analysis. In S.F. Sclossman. <i>et al.</i> 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. [Vet Immunol Immunopathol. 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. [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. [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. [Hum 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. [FASEB 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. [J Virol. 85 \(19\): 9749-66.](#)
 13. Löffler, S. *et al.* (1997) CD9, a tetraspan transmembrane protein, renders cells susceptible to canine distemper virus. [J Virol. 71: 42-9.](#)
 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.](#)
 17. Wąchalska, M. *et al.* (2020) Palmitoylated mNeonGreen Protein as a Tool for Visualization and Uptake Studies of Extracellular Vesicles [Membranes. 10 \(12\): 373.](#)
 18. 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.](#)
 19. Fu, T. *et al.* (2021) Biomimetic vascularized adipose-derived mesenchymal stem cells bone-periosteum graft enhances angiogenesis and osteogenesis in a rabbit spine fusion model. [Stem Cell Res Therapy. 15 Sep \[Epub ahead of print\].](#)
 20. 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.](#)

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

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
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](#)

Recommended Negative Controls

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

North & South Tel: +1 800 265 7376

America 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M384191:210513'

Printed on 09 Feb 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)