Datasheet: MCA469A488

Description:	MOUSE ANTI HUMAN CD9:Alexa Fluor® 488
Specificity:	CD9
Other names:	MRP-1
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	MM2/57
Isotype:	IgG2b
Quantity:	100 TESTS/1ml

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 product 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 product 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.

Product Form

Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

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 0.05 mg/ml

Immunogen

Human platelet membranes

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 1x10^6 cells in 100ul
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. Vet Immunol Immunopathol. 64 (1): 1-13. 3. Ibrahim,S. *et al.* (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes Vet.Immunol Immunopathol. 119: 63-80 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. 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.

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
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
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 IgG2b NEGATIVE CONTROL:Alexa Fluor® 488 (MCA691A488)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
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