

Datasheet: MCA2411PE

Description:	MOUSE ANTI DOG CD34:RPE
Specificity:	CD34
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	1H6
Isotype:	IgG1
Quantity:	100 TESTS

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 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	Dog						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1 ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
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 5% Sucrose						

Immunogen	Canine CD34 fusion protein.
External Database Links	<p>UniProt: Q28270 Related reagents</p> <p>Entrez Gene: 415130 CD34 Related reagents</p>
RRID	AB_609594
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS-1/FOX-NY myeloma cell line.
Specificity	<p>Mouse anti dog CD34 antibody, clone 1H6 recognizes the canine homologue of CD34, a glycosylated type 1 transmembrane protein of approximately 110 kDa (McSweeney et al. 1998) expressed on the cell surface of endothelial cells and haematopoietic stem cells.</p> <p>Mouse anti dog CD34 antibody, clone 1H6 is a key marker of canine hematopoietic progenitor cells and is reported for use in CD34+ enrichment assays, (Goerner et al. 2001) and (Horn et al. 2004).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. McSweeney, P.A. <i>et al.</i> (1998) Characterization of monoclonal antibodies that recognize canine CD34. Blood. 91 (6): 1977-86. 2. Goerner, M. <i>et al.</i> (1999) The use of granulocyte colony-stimulating factor during retroviral transduction on fibronectin fragment CH-296 enhances gene transfer into hematopoietic repopulating cells in dogs. Blood. 94 (7): 2287-92. 3. Bhattacharya, V. <i>et al.</i> (2000) Enhanced endothelialization and microvessel formation in polyester grafts seeded with CD34(+) bone marrow cells. Blood. 95 (2): 581-5. 4. Goerner, M. <i>et al.</i> (2001) Sustained multilineage gene persistence and expression in dogs transplanted with CD34(+) marrow cells transduced by RD114-pseudotype oncoretrovirus vectors. Blood. 98 (7): 2065-70. 5. Horn, P.A. <i>et al.</i> (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. Blood. 103 (10): 3710-6. 6. Avallone, G. <i>et al.</i> (2007) The spectrum of canine cutaneous perivascular wall tumors: morphologic, phenotypic and clinical characterization. Vet Pathol. 44 (5): 607-20. 7. Palmieri, C. <i>et al.</i> (2013) Use of electron microscopy to classify canine perivascular wall tumors. Vet Pathol. 50 (2): 226-33. 8. Georges, G. <i>et al.</i> (2001) Engraftment of DLA-haploidentical marrow with ex vivo expanded, retrovirally transduced cytotoxic T lymphocytes. Blood. 98:3447-55. 9. Bearden, R.N. <i>et al.</i> (2017) <i>In-vitro</i> 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. 10. Trindade, A.B. <i>et al.</i> (2017) Mesenchymal-like stem cells in canine ovary show high differentiation potential. Cell Prolif. Oct 08 [Epub ahead of print]. 11. Lee, S.H. <i>et al.</i> (2016) Impact of local injection of brain-derived neurotrophic factor-

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12. Muir, P. *et al.* (2016) Autologous Bone Marrow-Derived Mesenchymal Stem Cells Modulate Molecular Markers of Inflammation in Dogs with Cruciate Ligament Rupture. [PLoS One. 11 \(8\): e0159095](#).
13. Rajawat, Y.S. *et al.* (2021) *In Vivo* Gene Therapy for Canine SCID-X1 Using Cocal-Pseudotyped Lentiviral Vector. [Hum Gene Ther. 32 \(1-2\): 113-27](#).
14. Grudzien, M. *et al.* (2021) A newly established canine NK-type cell line and its cytotoxic properties. [Vet Comp Oncol. 19 \(3\): 567-77](#).
15. Tongu, E.A.O. *et al.* (2021) Allogenic mesenchymal stem cell-conditioned medium does not affect sperm parameters and mitigates early endometrial inflammatory responses in mares. [Theriogenology. 169: 1-8](#).
16. Jaensch, S. *et al.* (2022) Clinicopathologic and immunophenotypic features in dogs with presumptive large granular lymphocyte leukaemia [Australian Veterinary Journal. \[Epub ahead of print\]](#).

Further Reading 1. McSweeney, P. *et al.* (1996) Canine CD34: cloning of the cDNA and evaluation of an antiserum to recombinant protein. [Blood. 88:1992-2003](#).

Storage Prior to reconstitution store at +4°C.
After reconstitution store at +4°C.
DO NOT FREEZE. This product is photosensitive and should be protected from light.
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 #20487 available at: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)

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