

Datasheet: MCA2411A647

BATCH NUMBER 150140

Description:	MOUSE ANTI DOG CD34:Alexa Fluor® 647
Specificity:	CD34
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	1H6
Isotype:	IgG1
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 - 1/10

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 Alexa Fluor®647- liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
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		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Canine CD34 fusion protein.
External Database Links	<p>UniProt: Q28270 Related reagents</p> <p>Entrez Gene: 415130 CD34 Related reagents</p>
RRID	AB_2074486
Fusion Partners	Spleen cells from immunised 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 studies, (Goerner et al. 2001) and (Horn et al. 2004).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 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-

expressing mesenchymal stromal cells (MSCs) combined with intravenous MSC delivery in a canine model of chronic spinal cord injury. [Cytotherapy. Oct 28 \[Epub ahead of print\].](#)
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.](#)

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 Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. 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.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2411A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

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