

Datasheet: MCA2411B

BATCH NUMBER 1608

Description:	MOUSE ANTI DOG CD34:Biotin
Specificity:	CD34
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	1H6
Isotype:	IgG1
Quantity:	0.1 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	▪			Neat - 1/5

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 Biotin - liquid
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 0.1 mg/ml
Immunogen	Canine CD34 fusion protein.

External Database
Links

UniProt:

[Q28270](#) [Related reagents](#)

Entrez Gene:

[415130](#) CD34 [Related reagents](#)

RRID AB_1604777

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1/FOX-NY myeloma cell line.

Specificity **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.

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](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. McSweeney, P.A. *et al.* (1998) Characterization of monoclonal antibodies that recognize canine CD34. [Blood. 91 \(6\): 1977-86.](#)
2. Goerner, M. *et al.* (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. *et al.* (2000) Enhanced endothelialization and microvessel formation in polyester grafts seeded with CD34(+) bone marrow cells. [Blood. 95 \(2\): 581-5.](#)
4. Goerner, M. *et al.* (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. *et al.* (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. [Blood. 103 \(10\): 3710-6.](#)
6. Avallone, G. *et al.* (2007) The spectrum of canine cutaneous perivascular wall tumors: morphologic, phenotypic and clinical characterization. [Vet Pathol. 44 \(5\): 607-20.](#)
7. Palmieri, C. *et al.* (2013) Use of electron microscopy to classify canine perivascular wall tumors. [Vet Pathol. 50 \(2\): 226-33.](#)
8. Georges, G. *et al.* (2001) Engraftment of DLA-haploidentical marrow with ex vivo expanded, retrovirally transduced cytotoxic T lymphocytes. [Blood. 98:3447-55.](#)
9. 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.](#)
10. Trindade, A.B. *et al.* (2017) Mesenchymal-like stem cells in canine ovary show high differentiation potential. [Cell Prolif. Oct 08 \[Epub ahead of print\].](#)
11. Lee, S.H. *et al.* (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. 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

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2411B>
10041

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