

## Datasheet: MCA2411GA

### BATCH NUMBER 1212R

<b>Description:</b>	MOUSE ANTI DOG CD34
<b>Specificity:</b>	CD34
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1H6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen			▪	
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.

<b>Target Species</b>	Dog
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Canine CD34 fusion protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q28270</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">415130</a>    CD34    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1/FOX-NY myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti dog CD34 antibody, clone 1H6</b> recognizes the canine homologue of CD34, a glycosylated type 1 transmembrane protein of approximately 110 kDa (<a href="#">McSweeney et al. 1998</a>) 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, (<a href="#">Goerner et al. 2001</a>) and (<a href="#">Horn et al. 2004</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>Western Blotting</b>	MCA2411GA detects a band of approximately 110kDa.
<b>References</b>	<ol style="list-style-type: none"> <li>1. McSweeney, P.A. <i>et al.</i> (1998) Characterization of monoclonal antibodies that recognize canine CD34. <a href="#">Blood. 91 (6): 1977-86.</a></li> <li>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. <a href="#">Blood. 94 (7): 2287-92.</a></li> <li>3. Bhattacharya, V. <i>et al.</i> (2000) Enhanced endothelialization and microvessel formation in polyester grafts seeded with CD34(+) bone marrow cells. <a href="#">Blood. 95 (2): 581-5.</a></li> <li>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. <a href="#">Blood. 98 (7): 2065-70.</a></li> <li>5. Horn, P.A. <i>et al.</i> (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. <a href="#">Blood. 103 (10): 3710-6.</a></li> <li>6. Avallone, G. <i>et al.</i> (2007) The spectrum of canine cutaneous perivascular wall tumors: morphologic, phenotypic and clinical characterization. <a href="#">Vet Pathol. 44 (5): 607-20.</a></li> <li>7. Palmieri, C. <i>et al.</i> (2013) Use of electron microscopy to classify canine perivascular wall tumors. <a href="#">Vet Pathol. 50 (2): 226-33.</a></li> <li>8. Georges, G. <i>et al.</i> (2001) Engraftment of DLA-haploidentical marrow with ex vivo expanded, retrovirally transduced cytotoxic T lymphocytes. <a href="#">Blood. 98:3447-55.</a></li> <li>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. <a href="#">Stem Cell Res Ther. 8 (1): 218.</a></li> </ol>

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](#).

<b>Further Reading</b>	1. McSweeney, P. <i>et al.</i> (1996) Canine CD34: cloning of the cDNA and evaluation of an antiserum to recombinant protein. <a href="#">Blood. 88:1992-2003</a> .
<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2411GA">https://www.bio-rad-antibodies.com/SDS/MCA2411GA</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M366852:200529'

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