

Datasheet: MCA1036GA

Description:	RAT ANTI DOG CD90
Specificity:	CD90
Other names:	THY1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YKIX337.217
Isotype:	IgG2b
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	▪			1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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	Dog
Product Form	Purified IgG - liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant.
Buffer Solution	Phosphate buffered saline.
Preservative Stabilisers	0.09% sodium azide.

Carrier Free	Yes.
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml.
Immunogen	Con A stimulated canine T cells.
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
Specificity	<p>Rat anti Dog CD90, clone YKIX337.217 recognizes the canine Thy-1 cell surface antigen, also known as CD90. CD90 is a 20-30 kDa glycoprotein expressed by peripheral T lymphocytes, monocytes, thymocytes and vascular endothelium in dogs.</p> <p>Rat anti Dog CD90, clone YKIX337.217 has been demonstrated to deplete T cells when administered <i>in vivo</i> (Watson et al. 1993), and to block Con A driven T cell proliferation <i>in vitro</i>.</p> <p>Rat anti Dog CD90, clone YKIX337.217 is a useful clone for the immunophenotyping of cells and discrimination between a wide variety of lymphoproliferative disorders in dogs (Adam et al. 2009).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl.
References	<ol style="list-style-type: none"> Cobbold, S. & Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). Tissue Antigens. 43 (3): 137-54. Carneiro, C.M. <i>et al.</i> (2007) Differential impact of metacyclic and blood trypomastigotes on parasitological, serological and phenotypic features triggered during acute <i>Trypanosoma cruzi</i> infection in dogs. Acta Trop. 101: 120-9. Kang, J.W. <i>et al.</i> (2008) Soluble factors-mediated immunomodulatory effects of canine adipose tissue-derived mesenchymal stem cells. Stem Cells Dev. 17: 681-93. Sanchez, M.A. <i>et al.</i> (2004) Organ-specific immunity in canine visceral leishmaniasis: analysis of symptomatic and asymptomatic dogs naturally infected with <i>Leishmania chagasi</i>. Am J Trop Med Hyg. 70: 618-24. Giunchetti, R.C. <i>et al.</i> (2008) Histopathology, parasite density and cell phenotypes of the popliteal lymph node in canine visceral leishmaniasis. Vet Immunol Immunopathol. 121: 23-33. Reis, A.B. (2005) Establishment of a microplate assay for flow cytometric assessment and its use for the evaluation of age-related phenotypic changes in canine whole blood leukocytes. Vet Immunol Immunopathol. 103: 173-85. 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. Muir, P. <i>et al.</i> (2016) Autologous Bone Marrow-Derived Mesenchymal Stem Cells Modulate Molecular Markers of Inflammation in Dogs with Cruciate Ligament Rupture. PLoS One. 11 (8): e0159095. Nishimura, T. <i>et al.</i> (2017) Feeder-independent canine induced pluripotent stem cells

maintained under serum-free conditions. [Mol Reprod Dev. Feb 27. \[Epub ahead of print\]](#)

10. Lee, J. *et al.* (2016) Chondrogenic potential and anti-senescence effect of hypoxia on canine adipose mesenchymal stem cells. [Vet Res Commun. 40 \(1\): 1-10.](#)

11. Rathore, K. & Cekanova, M. (2015) Effects of environmental carcinogen benzo(a)pyrene on canine adipose-derived mesenchymal stem cells. [Res Vet Sci. 103: 34-43.](#)

12. Trindade, A.B. *et al.* (2017) Mesenchymal-like stem cells in canine ovary show high differentiation potential. [Cell Prolif. 50 \(6\)Oct 08 \[Epub ahead of print\].](#)

13. Wijekoon, H.M.S. *et al.* (2017) Differentiation potential of synoviocytes derived from joints with cranial cruciate ligament rupture and medial patella luxation in dogs. [Res Vet Sci. 114: 370-7.](#)

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.](#)

Further Reading 1. Watson, C.J. *et al.* (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog. [Br J Surg. 80: 1389-92.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only.

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL \(MCA6006GA\)](#)

North & South America Tel: +1 800 265 7376
Fax: +1 919 878 3751

Worldwide Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739

Europe Tel: +49 (0) 89 8090 95 21
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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

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