

Datasheet: MCA1041GA

Description:	RAT ANTI DOG CD44
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YKIX337.8.7
Isotype:	IgG2a
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	▪			1/10 - 1/20
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.

Target Species

Dog

Species Cross Reactivity

Reacts with: Raccoon

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Concanavilin A activated Canine T cells.
External Database Links	<p>UniProt: Q28284 Related reagents</p> <p>Entrez Gene: 403939 CD44 Related reagents</p>
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 CD44 antibody, clone YKIX337.8.7 recognises canine CD44, also known as H-CAM, a single-pass type 1 membrane of approximately 90 kDa expressed by most leucocytes and epithelial cells. CD44 expression is markedly increased upon cell activation (Aldinger et al. 2000).</p> <p>CD44 is involved in cell-cell, cell adhesion and cell migration and is the principal cellular receptor for hyaluronate via its LINK domain, additionally CD44 also interacts with other ligands including collagens and metalloproteinases.</p> <p>Studies have demonstrated that altered CD44 expression is detected in a many forms of invasive and metastatic cancers, CD44 expression has been observed on canine mammary and melanocytic tumors (Serra et al. 2004).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. 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. 2. Stein, V.M. et al. (2008) Immunophenotypical characterization of monocytes in canine distemper virus infection. Vet Microbiol. 131:237-46. 3. Salvatierra, A. et al. (2001) Antithrombin III prevents early pulmonary dysfunction after lung transplantation in the dog. Circulation. 104: 2975-80. 4. Sanchez, M.A. et al. (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. 5. Stein, V.M. et al. (2004) Characterization of canine microglial cells isolated ex vivo. Vet Immunol Immunopathol. 99: 73-85.

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8. Trindade, A.B. *et al.* (2017) Mesenchymal-like stem cells in canine ovary show high differentiation potential. [Cell Prolif. 50 \(6\)Oct 08 \[Epub ahead of print\].](#)
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10. Salinas Tejedor, L. *et al.* (2015) Mesenchymal stem cells do not exert direct beneficial effects on CNS remyelination in the absence of the peripheral immune system. [Brain Behav Immun. 50: 155-65.](#)
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12. 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.](#)
13. Hansmann, F. *et al.* (2018) Beneficial and detrimental impact of transplanted canine adipose-derived stem cells in a virus-induced demyelinating mouse model. [Vet Immunol Immunopathol. 202: 130-40.](#)
14. Elshafae, S.M. *et al.* (2017) The Effect of a Histone Deacetylase Inhibitor (AR-42) on Canine Prostate Cancer Growth and Metastasis. [Prostate. 77 \(7\): 776-93.](#)
15. Gouveia, G.M. *et al.* (2013) Analysis of cancer stem cells in dog's mammary neoplasias. [Braz J Vet Med, 35\(3\), 229-35.](#)

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 (STAR16...)	DyLight®800

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) [DyLight®650](#), [DyLight®800](#)

Goat Anti Rat IgG (STAR72...) [HRP](#)

Rabbit Anti Rat IgG (STAR21...) [HRP](#)

Rabbit Anti Rat IgG (STAR17...) [FITC](#)

Goat Anti Rat IgG (STAR131...) [Alk. Phos.](#), [Biotin](#)

Recommended Useful Reagents

[MOUSE ANTI DOG CD34:RPE \(MCA2411PE\)](#)

[MOUSE ANTI DOG CD34:FITC \(MCA2411F\)](#)

[MOUSE ANTI DOG CD34:Alexa Fluor® 647 \(MCA2411A647\)](#)

[MOUSE ANTI DOG CD34 \(MCA2411GA\)](#)

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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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