

Datasheet: MCA1041A488

BATCH NUMBER 159443

Description:	RAT ANTI DOG CD44:Alexa Fluor® 488
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	YKIX337.8.7
Isotype:	IgG2a
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	▪			1/10 - 1/20

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

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 conjugated to Alexa Fluor 488 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519

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) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05mg/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>
RRID	AB_10926391
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 recognizes 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 it's LINK domain, additionally CD44 interacts with other ligands including collagens and metalloproteinases.</p> <p>Altered CD44 expression is detected in many forms of invasive and metastatic cancer, 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

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7. 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.](#)

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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.](#)

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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. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA1041A488>
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Regulatory For research purposes only

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