

Datasheet: MCA1041A488

BATCH NUMBER 154819

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	Reacts with: Racco	oon		
Reactivity	reactivity is derived	tivity and working conditi I from testing within our la cations from the originato	aboratories, peer-rev	viewed publications
Product Form	Purified IgG conjug	gated to Alexa Fluor 488	- liquid	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
IVIGA LA/LIII		=20000000000000000000000000000000000000	,	

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	UniProt: Q28284 Related reagents Entrez Gene:
	403939 CD44 Related reagents
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	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 (Alldinger et al. 2000).
	CD44 is involved in cell-cell, cell adhesion and cell migration and is the principal cellular receptor for hyaluronate via it's <u>LINK</u> domain, additionally CD44 also interacts with other ligands including collagens and metalloproteinases.
	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 (<u>Serra et al. 2004</u>).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	 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). <u>Tissue Antigens. 43 (3): 137-54.</u> Stein, V.M. <i>et al.</i> (2008) Immunophenotypical characterization of monocytes in canine distemper virus infection. <u>Vet Microbiol. 131:237-46.</u> Salvatierra, A. <i>et al.</i> (2001) Antithrombin III prevents early pulmonary dysfunction after lung transplantation in the dog. <u>Circulation. 104: 2975-80.</u>

- lung transplantation in the dog. <u>Circulation</u>. 104: 2975-80.
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Immunol Immunopathol. 99: 73-85.

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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. <u>Brain Behav Immun. 50: 155-65.</u>
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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. <u>Res Vet Sci. 114</u>: 370-7.
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- 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

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. 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

Acknowledgements

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

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Printed on 18 Jan 2024

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