

Datasheet: MCA740F BATCH NUMBER 167459

Description:	MOUSE ANTI HUMAN CD42b:FITC
Specificity:	CD42b
Other names:	GPIB-ALPHA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	AK2
Isotype:	lgG1
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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes No	Not Determined	Suggested Dilution			
	Flow Cytometry	•		Neat - 1/10			
	Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. The suggested working dilution is given as a guide only. It is recommended that the user titrates the antibody for use in his/her own system using appropriate negative/positive controls.						
Target Species	Human						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)				
	FITC	490	525				
Preparation	Purified IgG prepared t supernatant	by affinity chromatog	raphy on Protein A fron	n tissue culture			
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum A	lbumin					
Approx. Protein	IgG concentration 0.1 r	ng/ml					

Concentrations

External Database Links RRID Specificity	UniProt: P07359 Related reagents Entrez Gene: 2811 GP1BA Related reagents AB_321701 Mouse anti Human CD42b antibody, clone AK2 recognizes the human CD42b cell surface antigen, also known as platelet glycoprotein GP1B.
	CD42b is expressed by platelets and megakaryocytes. Clone AK2 has been reported to block the binding of von Willebrand Factor (VWF) to platelets.
Flow Cytometry	Use 10ul of the suggested working dilution to label 100ul whole blood.
References	 Ward, C.M. & Berndt, M.C. (1995) Epitope and functional characterization of the CD42 (gplb/IX) mAb panel. Leucocyte Typing V. White Cell Differentiation Antigens. Volume Two. Oxford University Press, Oxford. Burgess, J.K. <i>et al.</i> (1998) Quinine-dependent antibodies bind a restricted set of epitopes on the glycoprotein Ib-IX complex: characterization of the epitopes. <u>Blood. 92</u>: 2366-73. Burgess, J.K. <i>et al.</i> (2000) Rifampicin-dependent antibodies bind a similar or identical epitope to glycoprotein IX-specific quinine-dependent antibodies. <u>Blood. 95</u>: 1988-92. Jayo, A. <i>et al.</i> (2010) L718P mutation in the membrane-proximal cytoplasmic tail of beta 3 promotes abnormal alpha IIb beta 3 clustering and lipid microdomain coalescence, and associates with a thrombasthenia-like phenotype. <u>Haematologica. 95</u>: 1158-66. Lova, P. <i>et al.</i> (2004) Contribution of protease-activated receptors 1 and 4 and glycoprotein Ib-IX-V in the G(I)-independent activation of platelet Rap1B by thrombin. J Biol Chem. 279: 25299-306. Shen, Y. <i>et al.</i> (2000) Requirement of leucine-rich repeats of glycoprotein (GP) Ibalpha for shear-dependent and static binding of von Wilebrand factor to the platelet membrane GP Ib-IX-V complex. <u>Blood. 95: 903-10</u>. Wright, S.D. <i>et al.</i> (1993) Double heterozygosity for mutations in the platelet glycoprotein IX gene in three siblings with Bernard-Soulier syndrome. <u>Blood. 81: 2339-47</u>. Nomura, S. <i>et al.</i> (2008) Platelets undergo phosphorylation of Syk at Y525/526 and Y352 in response to pathophysiological shear stress. <u>Am J Physiol Cell Physiol. 295</u>: C1045-54. Balduini, A. <i>et al.</i> (2009) Adhesive receptors, extracellular proteins and myosin IIA orchestrate proplatelet formation by human megakaryocytes. <u>J Thromb Haemost. 6</u>; 1900-7. Amor, N.B. <i>et al.</i> (2009) Acidic-store depletion is required for human platelet aggregation. <u>Blood Coagul Fibrinolysis. 20: 511-6</u>.

	12. Tasneem, S. <i>et al.</i> (2009) Platelet adhesion to multimerin 1 in vitro: influences of platelet membrane receptors, von Willebrand factor and shear. <u>J Thromb Haemost. 7: 685-92.</u>	
	13. Lincoln, B. <i>et al.</i> (2010) Integrated system investigating shear-mediated platelet interactions with von Willebrand factor using microliters of whole blood <u>Anal Biochem.</u> <u>405: 174-83.</u>	
	14. Goetzl, E.J. <i>et al.</i> (2016) Human plasma platelet-derived exosomes: effects of aspirir FASEB J. 30 (5): 2058-63.	۱.
	15. Michalska-Jakubus, M. <i>et al.</i> (2017) Plasma endothelial microparticles reflect the extent of capillaroscopic alterations and correlate with the severity of skin involvement in systemic sclerosis. <u>Microvasc Res. 110: 24-31.</u>	I
	 16. Ralph, A. <i>et al.</i> (2016) Computational Tracking of Shear-Mediated Platelet Interaction with von Willebrand Factor. <u>Cardiovasc Eng Technol. 7 (4): 389-405.</u> 17. Rossi, E. <i>et al.</i> (2018) Human endoglin as a potential new partner involved in platele 	
	endothelium interactions. <u>Cell Mol Life Sci. 75 (7): 1269-84.</u>	ι-
	18. Kim, J.S. <i>et al.</i> (2021) Randomization to Omega-3 Fatty Acid Supplementation and Endothelial Function in COPD: The COD-Fish Randomized Controlled Trial. <u>Chronic Obs</u> <u>Pulm Dis. 8(1):41-53.</u>	<u>str</u>
	19. Yang, B. <i>et al.</i> (2023) Endothelial-Related Biomarkers in Evaluation of Vascular Function During Progression of Sepsis After Severe Trauma: New Potential Diagnostic Tools in Sepsis. <u>J Inflamm Res. 16: 2773-82.</u>	
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store a -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	
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA740F 10041	
Regulatory	For research purposes only	

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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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