

# Datasheet: MCA740GA BATCH NUMBER 150993

Description:	MOUSE ANTI HUMAN CD42b
Specificity:	CD42b
Other names:	GPIB-ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AK2
Isotype:	lgG1
Quantity:	0.1 mg

# **Product Details**

Applications	This product has been r	eported to	work in tl	ne following application	s This information is		
	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-</u>						
	rad-antibodies.com/prot						
	· · · · · ·	Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry	-			1/50 - 1/100		
	ELISA	-					
	Immunoprecipitation	-					
	Where this antibody has	s not been	tested for	r use in a particular teo	hnique this does not		
	necessarily exclude its use in such procedures. The suggested working dilution is given						
	as a guide only. It is rec	ommende	d that the	user titrates the antibo	ody for use in his/her		
	own system using appro	opriate neg	gative/pos	itive controls.			
Target Species	Human						
ranget opeolog	Turnan						
Product Form	Purified IgG - liquid						
Preparation	Purified IgG prepared b	v affinity c	hromatoq	ranhy on Protein G from	n tissue culture		
	supernatant	y uninty o	mematog				
Buffer Solution	Phosphate buffered sali	ne					
Preservative Stabilisers	0.09% Sodium Azide						
Carrier Free	Yes						

IgG concentration 1 mg/ml
UniProt: <u>P07359</u> <u>Related reagents</u> Entrez Gene: <u>2811</u> GP1BA <u>Related reagents</u>
AB_324295
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.
Use 10ul of the suggested working dilution to label 100ul whole blood.
<ol> <li>Ward, C.M. &amp; 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.</li> <li>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.</li> <li>Burgess, J.K. <i>et al.</i> (2000) Rifampicin-dependent antibodies. <u>Blood. 95</u>: 1988-92.</li> <li>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.</li> <li>Lova, P. <i>et al.</i> (2000) 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 <u>Biol Chem. 279</u>: 25299-306.</li> <li>Shen, Y. <i>et al.</i> (2000) Requirement of leucine-rich repeats of glycoprotein (GP) Ibalpha for shear-dependent and static binding of von Willebrand factor to the platelet glycoprotein IX gene in three siblings with Bernard-Soulier syndrome. <u>Blood. 81</u>: 2339-47.</li> <li>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.</li> <li>Balduini, A. <i>et al.</i> (2008) Adhesive receptors, extracellular proteins and myosin IIA orchestrate proplatelet formation by human megakaryocytes. <u>J Thromb Haemost. 6</u>: 1900-7.</li> </ol>

	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:</u> <u>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 EJ et al. (2016) Human plasma platelet-derived exosomes: effects of aspirin.				
	FASEB J. Feb 12. pii: fj.201500150R. [Epub ahead of print]				
	15. Michalska-Jakubus, M. et al. (2016) Plasma endothelial microparticles reflect the				
	extent of capillaroscopic alterations and correlate with the severity of skin involvement in				
	systemic sclerosis. <u>Microvasc Res. Nov 23. pii: S0026-2862(16)30097-8. [Epub ahead of print]</u>				
	16. Ralph, A. <i>et al.</i> (2016) Computational Tracking of Shear-Mediated Platelet Interactions				
	with von Willebrand Factor. Cardiovasc Eng Technol. 7 (4): 389-405.				
	17. Rossi, E. et al. (2017) Human endoglin as a potential new partner involved in platelet-				
	endothelium interactions. Cell Mol Life Sci. Oct 28 [Epub ahead of print].				
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. 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				
Health And Safety	Material Safety Datasheet documentation #10040 available at:				
Information	https://www.bio-rad-antibodies.com/SDS/MCA740GA				
	10040				
Regulatory	For research purposes only				

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12)	<u>RPE</u>			
Goat Anti Mouse IgG IgA IgM (STAR87) <u>HRP</u>				
Goat Anti Mouse IgG (STAR76)	<u>RPE</u>			
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>			
Rabbit Anti Mouse IgG (STAR13)	<u>HRP</u>			
Goat Anti Mouse IgG (Fc) (STAR120)	<u>FITC, HRP</u>			
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>			
Goat Anti Mouse IgG (STAR77)	HRP			

#### Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

#### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide
America	Fax: +1 919 878 3751	
	Email: antibody_sales_us@bio-rad.com	

 Tel: +44 (0)1865 852 700
 Europe

 Fax: +44 (0)1865 852 739
 Email: antibody\_sales\_uk@bio-rad.com

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M368858:200529'

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