Datasheet: MCA216T BATCH NUMBER 154777

Description:	MOUSE ANTI HUMAN CD66b
Specificity:	CD66b
Other names:	BILIARY GLYCOPROTEIN, CARCINOEMBRYONIC ANTIGEN RELATED CELL ADHESION MOLECULE 8
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	80H3
Isotype:	lgG1
Quantity:	20 µg

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-</u>					
	rad-antibodies.com/proto						
		Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry	•			1/50 - 1/100		
	Immunohistology - Frozen (1)	•			1/25 - 1/100		
	Immunohistology - Paraffin		-				
	Where this antibody has	not been	tested for	r use in a particular teo	chnique 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.					
	(1)The epitope recognised by this antibody is reported to be sensitive to						
	formaldehyde fixation and tissue processing. Bio-Rad recommends the use of						
	acetone fixation for from	zen secti	ons.				
Target Species	Human						
Product Form	Purified IgG - liquid						
Preparation	Purified IgG prepared by supernatant	affinity cl	hromatogi	raphy on Protein A fror	n tissue culture		
Buffer Solution	Phosphate buffered salin	е					

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 0.5% Bovine Serum Albumin			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Human leucocytes from individuals with CML.			
External Database Links	UniProt: <u>P31997</u> <u>Related reagents</u> Entrez Gene: <u>1088</u> CEACAM8 <u>Related reagents</u>			
Synonyms	CGM6			
RRID	AB_2291565			
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse MOPC 315-43 myeloma cell line.			
Specificity	Mouse anti Human CD66b antibody, clone 80H3 reacts with the CEACAM8 or CGM6 gene product, from the carcinoembryonic gene family. The CEACAM8 gene product is called CD66b, Non-specific cross-reacting antigen NCA-95 or Carcinoembryonic antigen CGM6. CD66b is a 286 amino acid mature ~95-100 kDa GPI anchored molecule with an N-terminal 34 amino acid signal peptide and a 29 amino acid C-terminal propeptide, shed in the mature form. CD66b is expressed strongly by mature granulocytes and metamyelocytes, and weakly by bone marrow myelocytes. CD66b is not expressed by peripheral blood monocytes or lymphocytes.			
Flow Cytometry	Use 10ul of the suggested working dilution to label 5 x 10^5 cells or 100ul whole blood.			
Histology Positive Control Tissue	Bone Marrow			
References	 Mannoni, P. <i>et al.</i> (1982) Monoclonal antibodies against human granulocytes and myeloid differentiation antigens. <u>Hum Immunol. 5 (4): 309-23.</u> Ionita, M.G. <i>et al.</i> (2010) High neutrophil numbers in human carotid atherosclerotic plaques are associated with characteristics of rupture-prone lesions. <u>Arterioscler Thromb Vasc Biol. 30 (9): 1842-8.</u> Simard, J.C. <i>et al.</i> (2010) Induction of neutrophil degranulation by S100A9 via a MAPK-dependent mechanism. <u>J Leukoc Biol. 87 (5): 905-14.</u> Feuk-Lagerstedt, E. <i>et al.</i> (1999) Identification of CD66a and CD66b as the major galectin-3 receptor candidates in human neutrophils. <u>J Immunol. 163: 5592-8.</u> Jankowski, A. <i>et al.</i> (2002) Determinants of the phagosomal pH in neutrophils. <u>J Biol Chem. 277: 6059-66.</u> Jinnouchi, A. <i>et al.</i> (2005) Local anesthetics inhibit priming of neutrophils by lipopolysaccharide for enhanced release of superoxide: suppression of cytochrome b558 			

expression by disparate mechanisms. J Leukoc Biol. 78: 1356-65.

7. Thickett, D.R. *et al.* (2002) A role for vascular endothelial growth factor in acute and resolving lung injury. <u>Am J Respir Crit Care Med. 166: 1332-7.</u>

 Sekine, K. *et al.* (2006) Panning of multiple subsets of leukocytes on antibodydecorated poly(ethylene) glycol-coated glass slides. <u>J Immunol Methods. 313: 96-109.</u>
 Ottonello, L. *et al.* (1999) Monoclonal Lym-1 antibody-dependent cytolysis by neutrophils exposed to granulocyte-macrophage colony-stimulating factor: intervention of FcgammaRII (CD32), CD11b-CD18 integrins, and CD66b glycoproteins. <u>Blood. 93:</u> <u>3505-11.</u>

10. Ottonello, L. *et al.* (2000) Monoclonal Lym-1 antibody-targeted lysis of B lymphoma cells by neutrophils. Evidence for two mechanisms of FcgammaRII-dependent cytolysis. J Leukoc Biol. 68: 662-8.

11. Moraes, T.J. *et al.* (2006) Abnormalities in the pulmonary innate immune system in cystic fibrosis. <u>Am J Respir Cell Mol Biol. 34: 364-74.</u>

12. Nijhuis, J. *et al.* (2009) Neutrophil Activation in Morbid Obesity, Chronic Activation of Acute Inflammation <u>Obesity (Silver Spring). 17: 2014-8.</u>

13. Pliyev, B.K. and Menshikov, M.Y. (2010) Release of the soluble urokinase-type plasminogen activator receptor (suPAR) by activated neutrophils in rheumatoid arthritis. Inflammation. 33: 1-9.

Binet, F. and Girard, D. (2008) Novel human neutrophil agonistic properties of arsenic trioxide: involvement of p38 mitogen-activated protein kinase and/or c-jun NH2-terminal MAPK but not extracellular signal-regulated kinases-1/2. <u>J Leukoc Biol. 84: 1613-22.</u>
 Rosenkranz, A.R. *et al.* (1999) Novel C5-dependent mechanism of neutrophil stimulation by bioincompatible dialyzer membranes. <u>J Am Soc Nephrol. 10: 128-35.</u>
 Simard, J.C. *et al.* (2010) Induction of neutrophil degranulation by S100A9 via a MAPK-dependent mechanism. J Leukoc Biol. 87: 905-14.

17. Sekine, K. *et al.* (2006) Panning of multiple subsets of leukocytes on antibody-decorated poly(ethylene) glycol-coated glass slides <u>J Immunol Methods. 313: 96-109.</u>
18. Orozco-Uribe, M. *et al.* (2015) Early Exposure of Human Neutrophils to Mycobacteria Triggers Cell Damage and Pro-Inhibitory Molecules, but not Activation <u>Tuberculosis Ch4</u>
19. Whitmore, L.C. *et al.* (2016) A Common Genetic Variant in TLR1 Enhances Human Neutrophil Priming and Impacts Length of Intensive Care Stay in Pediatric Sepsis. <u>J</u>
<u>Immunol. 196 (3): 1376-86.</u>

20. Bastian, O.W. *et al.* (2016) Neutrophils contribute to fracture healing by synthesizing fibronectin+ extracellular matrix rapidly after injury. <u>Clin Immunol. 164: 78-84.</u>

21. Dyugovskaya, L. *et al.* (2016) Intermittent Hypoxia Affects the Spontaneous Differentiation *In Vitro* of Human Neutrophils into Long-Lived Giant Phagocytes. <u>Oxid Med</u> <u>Cell Longev. 2016: 9636937.</u>

22. Medford, A.J. *et al.* (2019) Blood-based monitoring identifies acquired and targetable driver *HER2* mutations in endocrine-resistant metastatic breast cancer. <u>NPJ Precis Oncol.</u> <u>3: 18.</u>

23. Ebright, R.Y. *et al.* (2020) HIF1A signaling selectively supports proliferation of breast cancer in the brain. <u>Nat Commun. 11 (1): 6311.</u>

24. Franses, J.W. *et al.* (2020) Pancreatic circulating tumor cell profiling identifies LIN28B as a metastasis driver and drug target. <u>Nat Commun. 11 (1): 3303.</u>

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

Storage

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 Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA216T 10041
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12)	RPE			
Goat Anti Mouse IgG IgA IgM (STAR87) <u>HRP</u>				
Goat Anti Mouse IgG (STAR76)	RPE			
Goat Anti Mouse IgG (STAR70)	FITC			
Goat Anti Mouse IgG (H/L) (STAR117)	<u>Alk. Phos., DyLight®488, DyLight®550,</u>			
	<u>DyLight®650, DyLight®680, DyLight®800,</u>			
	FITC, HRP			
Rabbit Anti Mouse IgG (STAR9)	FITC			
Goat Anti Mouse IgG (STAR77)	HRP			
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP			
Rabbit Anti Mouse IgG (STAR13)	HRP			
Recommended Negative Controls				

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	ad.com	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 'M373002:200811'

Printed on 04 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint