

Datasheet: MCA1075F

BATCH NUMBER 1608

Description:	MOUSE ANTI HUMAN CD32:FITC
Specificity:	CD32
Other names:	FcRII
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	AT10
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 www.bio-rad-antibodies.com/protocols.

	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. 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.

Species Cross
Reactivity

Target Species

Reacts with: Dog, Rhesus Monkey, Pig

Human

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepa	red by affinity chromatog	raphy on Protein A
Buffer Solution	Phosphate buffere	d saline	

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin	
	- Bovine Gerani Albaniin	
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml	
Immunogen	K562 cell line.	
External Database Links	UniProt: P12318 Related reagents P31994 Related reagents P31995 Related reagents	
	Entrez Gene: 2212 FCGR2A Related reagents 2213 FCGR2B Related reagents 9103 FCGR2C Related reagents	
Synonyms	CD32, FCG2, FCGR2A1, IGFR2	
RRID	AB_321660	
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.	
Specificity	Mouse anti Human CD32 antibody, clone AT10 recognizes the human CD32 antigen, a ~40 kDa glycoprotein that acts as a low affinity receptor for IgG (also known as Fc gamma RII). CD32 mediates several functions including endocytosis, activation of secretion, cytotoxicity and immunomodulation. CD32 is expressed by B cells, monocytes, granulocytes and platelets.	
	Mouse anti Human CD32 antibody, clone AT10 blocks the binding of IgG to Fc gamma RII (<u>Larsson et al. 1997</u>).	
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood	
References	1. Van Den Herik-Oudijk, I.E. <i>et al.</i> (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. <u>J Immunol. 152 (2): 574-85.</u> 2. Lilliehöök, I. <i>et al.</i> (1998) Expression of adhesion and Fcgamma-receptors on canine blood eosinophils and neutrophils studied by anti-human monoclonal antibodies. <u>Vet Immunol Immunopathol. 61 (2-4): 181-93.</u> 3. Larsson M <i>et al.</i> (1997) Human dendritic cells handling of binding, uptake and degradation of free and IgG-immune complexed dinitrophenylated human serum albumin <i>in vitro</i> . <u>Immunology. 90 (1): 138-46.</u> 4. Mold, C. and Du Clos, T.W. (2006) C-reactive protein increases cytokine responses to <i>Streptococcus pneumoniae</i> through interactions with Fc gamma receptors. <u>J Immunol.</u>	

176: 7598-604.

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- 7. Sims, G.P. *et al.* (2005) Identification and characterization of circulating human transitional B cells. <u>Blood. 105: 4390-8.</u>
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- 9. Zhao, X.W. *et al.* (2011) CD47-signal regulatory protein-α (SIRPα) interactions form a barrier for antibody-mediated tumor cell destruction. <u>Proc Natl Acad Sci U S A. 108 (45):</u> 18342-7.
- 10. Araújo, M.S.*et al.* (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. Vet Immunol Immunopathol. 141: 64-75.
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- 12. Santer, D.M. *et al.* (2010) C1q deficiency leads to the defective suppression of IFN-alpha in response to nucleoprotein containing immune complexes. <u>J Immunol. 185:</u> 4738-49.
- 13. Shannon, O. *et al.* (2010) Platelet activation and biofilm formation by *Aerococcus urinae*, an endocarditis-causing pathogen. Infect Immun. 78: 4268-75.
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- 15. Moreira, M.L. *et al.* (2016) Vaccination against canine leishmaniosis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes. <u>Vet Parasitol. 220: 33-45.</u>
- 16. Gazendam, R.P. *et al.* (2016) Impaired killing of *Candida albicans* by granulocytes mobilized for transfusion purposes: a role for granule components. <u>Haematologica. 101</u> (5): 587-96.
- 17. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with FcγR. Mol Immunol. 49 (1-2): 211-8.
- 18. Petersson, F. *et al.* (2018) Platelet activation and aggregation by the opportunistic pathogen *Cutibacterium* (*Propionibacterium*) *acnes*. <u>PLoS One</u>. 13 (1): e0192051.
- 19. Kahn, F. *et al.* (2008) Antibodies against a surface protein of *Streptococcus pyogenes* promote a pathological inflammatory response. <u>PLoS Pathog. 4 (9): e1000149.</u>
- 20. Bruggeman, C.W. *et al.* (2019) Tissue-specific expression of IgG receptors by human macrophages *ex vivo*. <u>PLoS One. 14 (10): e0223264.</u>
- 21. Chen, T. *et al.* (2020) Capsular glycan recognition provides antibody-mediated immunity against tuberculosis. J Clin Invest. 130 (4): 1808-22.

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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1075F 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)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364737:200529'

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