

Datasheet: MCA1075A647

## **BATCH NUMBER 154729**

Description:	MOUSE ANTI HUMAN CD32:Alexa Fluor® 647
Specificity:	CD32
Other names:	FcRII
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	AT10
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

Target Species	Human
Species Cross	Reacts with: Dog, Rhesus Monkey, Pig
Reactivity	N B Antibody reactivity and working conditions may v

**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 conjug	Purified IgG conjugated to Alexa Fluor®647- liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	Alexa Fluor®647	650	665	

Preparation Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide  1% Bovine Serum Albumin	
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Approx. Protein Concentrations	IgG concentration 0.05 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_324766	
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 <sup>6</sup> cells or 100ul whole blood	
References	<ol> <li>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></li> <li>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></li> <li>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></li> <li>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></li> </ol>	

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- 13. Shannon, O. *et al.* (2010) Platelet activation and biofilm formation by *Aerococcus urinae*, an endocarditis-causing pathogen. Infect Immun. 78: 4268-75.
- 14. Ito, T. *et al.* (1999) A CD1a+/CD11c+ subset of human blood dendritic cells is a direct precursor of Langerhans cells. J Immunol. 163: 1409-19.
- 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.
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- 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

### **Acknowledgements**

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# **Health And Safety** Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA1075A647

10041

#### Regulatory

For research purposes only

# Related Products

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

### **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

America

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Fax: +1 919 878 3751 Email: antibody\_sales\_us@bio-rad.com Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.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 'M364732:200529'

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