

Datasheet: MCA1075A647

Description:	MOUSE ANTI HUMAN CD32:Alexa Fluor® 647
Specificity:	CD32
Other names:	FcR2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	AT10
Isotype:	IgG1
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 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.

Target Species	Human		
Species Cross Reactivity	Reacts with: Dog, Rhesus Monkey, Pig N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	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		
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

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). The antigen mediates several functions including endocytosis, activation of secretion, cytotoxicity and immunomodulation. CD32 is expressed by B cells, monocytes, granulocytes and platelets.

Clone AT10 blocks the binding of IgG to Fc gamma RII ([Larsson *et al.* 1997](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood

References

- Greenman, J. *et al.* (1991) Characterization of a new monoclonal anti-Fc gamma RII antibody, AT10, and its incorporation into a bispecific F(ab')₂ derivative for recruitment of cytotoxic effectors. [Mol Immunol. 28 \(11\): 1243-54.](#)
- Van Den Herik-Oudijk, I.E. *et al.* (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. [J Immunol. 152 \(2\): 574-85.](#)
- Lilliehöök, I. *et al.* (1998) Expression of adhesion and Fc gamma-receptors on canine blood eosinophils and neutrophils studied by anti-human monoclonal antibodies. [Vet Immunol Immunopathol. 61 \(2-4\): 181-93.](#)
- Larsson M *et al.* (1997) Human dendritic cells handling of binding, uptake and degradation of free and IgG-immune complexed dinitrophenylated human serum albumin *in vitro*. [Immunology. 90 \(1\): 138-46.](#)
- Dutertre, C.A. *et al.* (2008) A novel subset of NK cells expressing high levels of inhibitory Fc gammaRIIB modulating antibody-dependent function. [J Leukoc Biol. 84 \(6\): 1511-20.](#)
- Devriendt, B. *et al.* (2010) Targeting of *Escherichia coli* F4 fimbriae to Fc gamma receptors enhances the maturation of porcine dendritic cells. [Vet Immunol Immunopathol. 135: 188-98.](#)
- Sims, G.P. *et al.* (2005) Identification and characterization of circulating human transitional B cells. [Blood. 105: 4390-8.](#)
- Benitez-Ribas, D. *et al.* (2006) Plasmacytoid dendritic cells of melanoma patients present exogenous proteins to CD4+ T cells after Fc gamma RII-mediated uptake. [J Exp Med. 203: 1629-35.](#)
- Zhao, X.W. *et al.* (2011) CD47-signal regulatory protein-α (SIRPα) interactions form a barrier for antibody-mediated tumor cell destruction. [Proc Natl Acad Sci U S A. 108 \(45\): 18342-7.](#)
- 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.](#)
- Benitez-Ribas, D. *et al.* (2006) Plasmacytoid dendritic cells of melanoma patients present exogenous proteins to CD4+ T cells after Fc gamma RII-mediated uptake. [J Exp Med. 203:](#)

[1629-35.](#)

12. Santer, D.M. *et al.* (2010) C1q deficiency leads to the defective suppression of IFN- α in response to nucleoprotein containing immune complexes. [J Immunol. 185: 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.](#)
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 leishmaniasis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes. [Vet Parasitol. 220: 33-45.](#)
16. Gazendam, R.P. *et al.* (2016) Impaired killing of *Candida albicans* by granulocytes mobilized for transfusion purposes: a role for granule components. [Haematologica. 101 \(5\): 587-96.](#)
17. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with Fc γ R. [Mol Immunol. 49 \(1-2\): 211-8.](#)
18. Petersson, F. *et al.* (2018) Platelet activation and aggregation by the opportunistic pathogen *Cutibacterium (Propionibacterium) acnes*. [PLoS One. 13 \(1\): e0192051.](#)

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.

Shelf Life

18 months from date of despatch.

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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)

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