

Datasheet: MCA1075PE

Description:	MOUSE ANTI HUMAN CD32:RPE
Specificity:	CD32
Other names:	FcRII
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	AT10
Isotype:	IgG1
Quantity:	100 TESTS

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

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 R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
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		
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 10 ⁶ cells or 100ul whole blood.
References	1. Greenman, J. <i>et al.</i> (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. 2. Van Den Herik-Oudijk, I.E. <i>et al.</i> (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. J Immunol. 152 (2): 574-85. 3. Lilliehöök, I. <i>et al.</i> (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. 4. 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>. Immunology. 90 (1): 138-46. 5. Dutertre, C.A. <i>et al.</i> (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. 6. Devriendt, B. <i>et al.</i> (2010) Targeting of <i>Escherichia coli</i> F4 fimbriae to Fc gamma receptors enhances the maturation of porcine dendritic cells. Vet Immunol Immunopathol. 135: 188-98. 7. Sims, G.P. <i>et al.</i> (2005) Identification and characterization of circulating human transitional B cells. Blood. 105: 4390-8. 8. Benitez-Ribas, D. <i>et al.</i> (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. 9. Zhao, X.W. <i>et al.</i> (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. 10. Araújo, M.S.<i>et al.</i> (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. 11. Benitez-Ribas, D. <i>et al.</i> (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. <i>et al.</i> (2010) C1q deficiency leads to the defective suppression of IFN-alpha 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 leishmaniosis 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 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*. [PLoS One. 13 \(1\): e0192051.](#)

Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

12 months from date of reconstitution.

Health And Safety Information

Material Safety Datasheet documentation #10075 available at:
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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