

Datasheet: MCA1075PET

BATCH NUMBER 1610

Description:	MOUSE ANTI HUMAN CD32:RPE
Specificity:	CD32
Other names:	FcRII
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	AT10
Isotype:	IgG1
Quantity:	25 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. 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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 0.25ml 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 (NaN ₃) 1% Bovine Serum Albumin 5% Sucrose
Immunogen	K562 cell line.
External Database Links	<p>UniProt:</p> <p>P12318 Related reagents</p> <p>P31994 Related reagents</p> <p>P31995 Related reagents</p> <p>Entrez Gene:</p> <p>2212 FCGR2A Related reagents</p> <p>2213 FCGR2B Related reagents</p> <p>9103 FCGR2C Related reagents</p>
Synonyms	CD32, FCG2, FCGR2A1, IGFR2
RRID	AB_1101925
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>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.</p> <p>Mouse anti Human CD32 antibody, clone AT10 blocks the binding of IgG to Fc gamma RII (Larsson <i>et al.</i> 1997).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood.
References	<ol style="list-style-type: none"> 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. J Immunol. 152 (2): 574-85. 2. 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. 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>. Immunology. 90 (1): 138-46. 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. J Immunol. 176: 7598-604.

5. Dutertre, C.A. *et al.* (2008) A novel subset of NK cells expressing high levels of inhibitory FcγRIIB modulating antibody-dependent function. [J Leukoc Biol. 84 \(6\): 1511-20.](#)
6. Devriendt, B. *et al.* (2010) Targeting of *Escherichia coli* F4 fimbriae to FcγRIIB receptors enhances the maturation of porcine dendritic cells. [Vet Immunol Immunopathol. 135: 188-98.](#)
7. Sims, G.P. *et al.* (2005) Identification and characterization of circulating human transitional B cells. [Blood. 105: 4390-8.](#)
8. Benitez-Ribas, D. *et al.* (2006) Plasmacytoid dendritic cells of melanoma patients present exogenous proteins to CD4+ T cells after FcγRII-mediated uptake. [J Exp Med. 203: 1629-35.](#)
9. 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.](#)
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.](#)
11. Bonnefont-Rebeix, C. *et al.* (2006) CD86 molecule is a specific marker for canine monocyte-derived dendritic cells. [Vet Immunol Immunopathol. 109 \(1-2\): 167-76.](#)
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 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.](#)
19. Kahn, F. *et al.* (2008) Antibodies against a surface protein of *Streptococcus pyogenes* promote a pathological inflammatory response. [PLoS Pathog. 4 \(9\): e1000149.](#)
20. Bruggeman, C.W. *et al.* (2019) Tissue-specific expression of IgG receptors by human macrophages *ex vivo*. [PLoS One. 14 \(10\): e0223264.](#)
21. Chen, T. *et al.* (2020) Capsular glycan recognition provides antibody-mediated immunity against tuberculosis. [J Clin Invest. 130 \(4\): 1808-22.](#)
22. Teuben, M.P.J. *et al.* (2021) Standardized porcine unilateral femoral nailing is associated with changes in PMN activation status, rather than aberrant systemic PMN prevalence. [Eur J Trauma Emerg Surg. Jun 10 \[Epub ahead of print\].](#)

Storage

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1075PET 20487
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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