

Datasheet: MCA1075

Description:	MOUSE ANTI HUMAN CD32
Specificity:	CD32
Other names:	FcRII
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AT10
Isotype:	IgG1
Quantity:	0.2 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	▪			20ug/ml
Immunohistology - Frozen (1)	▪			1/500 - 1/1000
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			20ug/ml
Western Blotting			▪	
Functional Assays (2)	▪			

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

(2)This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.

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 - liquid
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Preparation	Purified IgG prepared by affinity chromatography on Protein A
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Buffer Solution	TRIS buffered saline
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Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
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Approx. Protein Concentrations	IgG concentration 1 mg/ml
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Immunogen	K562 cell line.
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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
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Synonyms	CD32, FCG2, FCGR2A1, IGFR2
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RRID	AB_321659
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Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
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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>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or cells or 100ul whole blood.
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Histology Positive Control Tissue	Lymph node
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References

1. 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.](#)
2. 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.](#)
3. 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.](#)
4. Mold, C. and Du Clos, T.W. (2006) C-reactive protein increases cytokine responses to *Streptococcus pneumoniae* 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 Fc gamma RIIb modulating antibody-dependent function. [J Leukoc Biol. 84 \(6\): 1511-20.](#)
6. 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.](#)
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 Fc gamma RII-mediated uptake. [J Exp Med. 203: 1629-35.](#)
9. Zhao, X.W. *et al.* (2011) CD47-signal regulatory protein- α (SIRP α) 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 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.](#)

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.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10057 available at: 10057: <https://www.bio-rad-antibodies.com/uploads/MSDS/10057.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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