

## Datasheet: MCA1075

**BATCH NUMBER 154629**

<b>Description:</b>	MOUSE ANTI HUMAN CD32
<b>Specificity:</b>	CD32
<b>Other names:</b>	FcRII
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AT10
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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. Dialysis cassettes [EQU003](#) are suitable for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross</b>	Reacts with: Dog, Rhesus Monkey, Pig

<b>Reactivity</b>	<b>N.B.</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.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	TRIS buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	K562 cell line.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P12318</a>    <a href="#">Related reagents</a></p> <p><a href="#">P31994</a>    <a href="#">Related reagents</a></p> <p><a href="#">P31995</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">2212</a> FCGR2A    <a href="#">Related reagents</a></p> <p><a href="#">2213</a> FCGR2B    <a href="#">Related reagents</a></p> <p><a href="#">9103</a> FCGR2C    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD32, FCG2, FCGR2A1, IGFR2
<b>RRID</b>	AB_321659
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD32 antibody, clone AT10</b> 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 (<a href="#">Larsson <i>et al.</i> 1997</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100ul whole blood.
<b>Histology Positive</b>	Lymph node

## 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. 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.](#)
5. 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.](#)
6. Sims, G.P. *et al.* (2005) Identification and characterization of circulating human transitional B cells. [Blood. 105: 4390-8.](#)
7. 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.](#)
8. Zhao, X.W. *et al.* (2011) CD47-signal regulatory protein- $\alpha$  (SIRP $\alpha$ ) interactions form a barrier for antibody-mediated tumor cell destruction. [Proc Natl Acad Sci U S A. 108 \(45\): 18342-7.](#)
9. 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.](#)
10. 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.](#)
11. Santer, D.M. *et al.* (2010) C1q deficiency leads to the defective suppression of IFN-alpha in response to nucleoprotein containing immune complexes. [J Immunol. 185: 4738-49.](#)
12. Shannon, O. *et al.* (2010) Platelet activation and biofilm formation by *Aerococcus urinae*, an endocarditis-causing pathogen. [Infect Immun. 78: 4268-75.](#)
13. 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.](#)
14. 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.](#)
15. 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.](#)
16. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with Fc $\gamma$ R. [Mol Immunol. 49 \(1-2\): 211-8.](#)
17. Petersson, F. *et al.* (2018) Platelet activation and aggregation by the opportunistic pathogen *Cutibacterium (Propionibacterium) acnes*. [PLoS One. 13 \(1\): e0192051.](#)
18. Kahn, F. *et al.* (2008) Antibodies against a surface protein of *Streptococcus pyogenes*

promote a pathological inflammatory response. [PLoS Pathog. 4 \(9\): e1000149.](#)  
19. Bruggeman, C.W. *et al.* (2019) Tissue-specific expression of IgG receptors by human macrophages *ex vivo*. [PLoS One. 14 \(10\): e0223264.](#)

---

**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. 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

---

**Health And Safety Information** Material Safety Datasheet documentation #10057 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1075>  
10057

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
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 \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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)  
'M364731:200529'

Printed on 20 Mar 2025