

Datasheet: MCA1075 BATCH NUMBER 151933

Description:	MOUSE ANTI HUMAN CD32	
Specificity:	CD32	
Other names:	FcRII	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	AT10	
Isotype:	lgG1	
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. Dialysis cassettes <u>EQU003</u> are suitable for this purpose.

Target Species	Human
Species Cross	Reacts with: Dog, Rhesus Monkey, Pig

Reactivity	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				
Preparation	Purified IgG prepared by affinity chromatography on Protein A				
Buffer Solution	TRIS buffered saline				
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)				
Approx. Protein Concentrations	IgG concentration 1 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				
RRID	AB_321659				
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). CD32 mediates several functions including endocytosis, activation of secretion, cytotoxicity and immunomodulation. CD32 is expressed by B cells, monocytes, granulocytes and platelets. Mouse anti Human CD32 antibody, 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 cells or 100ul whole blood.				
Histology Positive	Lymph node				
	Lymph nodo				

References

- 1. Van Den Herik-Oudijk, I.E. *et al.* (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. <u>J Immunol</u>. 152 (2): 574-85.
- 2. Lilliehöök, I. *et al.* (1998) Expression of adhesion and Fcgamma-receptors on canine blood eosinophils and neutrophils studied by anti-human monoclonal antibodies. <u>Vet Immunol Immunopathol. 61 (2-4): 181-93.</u>
- 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*. <u>Immunology.</u> 90 (1): 138-46.
- 4. Dutertre, C.A. *et al.* (2008) A novel subset of NK cells expressing high levels of inhibitory FcgammaRIIB modulating antibody-dependent function. <u>J Leukoc Biol. 84 (6)</u>: 1511-20.
- 5. Devriendt, B. *et al.* (2010) Targeting of *Escherichia coli* F4 fimbriae to Fcgamma receptors enhances the maturation of porcine dendritic cells. <u>Vet Immunol Immunopathol.</u> 135: 188-98.
- 6. Sims, G.P. *et al.* (2005) Identification and characterization of circulating human transitional B cells. <u>Blood. 105: 4390-8.</u>
- 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. <u>J Exp Med. 203: 1629-35.</u>
- 8. Zhao, X.W. *et al.* (2011) CD47-signal regulatory protein-α (SIRPα) interactions form a barrier for antibody-mediated tumor cell destruction. <u>Proc Natl Acad Sci U S A. 108 (45):</u> 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. <u>Vet Immunol Immunopathol.</u> 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. <u>J Immunol. 185:</u> 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. <u>J Immunol. 163: 1409-19.</u>
- 14. 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. <u>Vet Parasitol. 220: 33-45.</u>
- 15. Gazendam, R.P. *et al.* (2016) Impaired killing of *Candida albicans* by granulocytes mobilized for transfusion purposes: a role for granule components. <u>Haematologica. 101</u> (5): 587-96.
- 16. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with FcγR. 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. <u>PLoS Pathog. 4 (9): e1000149.</u>
19. Bruggeman, C.W. *et al.* (2019) Tissue-specific expression of IgG receptors by human macrophages *ex vivo*. <u>PLoS One. 14 (10): e0223264.</u>

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,

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364731:200529'

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