

Datasheet: MCA1075F BATCH NUMBER 158996

| Description: | MOUSE ANTI HUMAN CD32:FITC | |
|---------------|----------------------------|--|
| Specificity: | CD32 | |
| Other names: | FcRII | |
| Format: | FITC | |
| Product Type: | Monoclonal Antibody | |
| Clone: | AT10 | |
| Isotype: | lgG1 | |
| Quantity: | 0.1 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 | - | | | Neat - 1/10 |

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.

| Species Cross |
|----------------------|
| Reactivity |

Target Species

Reacts with: Dog, Rhesus Monkey, Pig

Human

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------------|---|---------------------|-------------------|
| | FITC | 490 | 525 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A | | |
| Buffer Solution | Phosphate buffered s | aline | |

| Preservative Stabilisers | 0.09% Sodium Azide 1% Bovine Serum Albumin |
|--------------------------------|---|
| | - Bovine Gerani Albaniin |
| Approx. Protein Concentrations | IgG concentration 0.1 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_321660 |
| 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 (<u>Larsson et al. 1997</u>). |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood |
| References | Van Den Herik-Oudijk, I.E. <i>et al.</i> (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. <u>J Immunol. 152 (2): 574-85.</u> Lilliehöök, I. <i>et al.</i> (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> 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>. <u>Immunology. 90 (1): 138-46.</u> 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. <u>J Immunol.</u> |

176: 7598-604.

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- 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. <u>J Exp Med.</u> 203: 1629-35.
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- 12. 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.
- 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. <u>Vet Parasitol. 220: 33-45.</u>
- 16. Gazendam, R.P. *et al.* (2016) Impaired killing of *Candida albicans* by granulocytes mobilized for transfusion purposes: a role for granule components. <u>Haematologica</u>. 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*. <u>PLoS One</u>. 13 (1): e0192051.
- 19. 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>
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- 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. <u>Eur J Trauma Emerg Surg. Jun 10 [Epub ahead of print].</u>

| 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. This product is photosensitive and should be protected from light. | | | |
| Guarantee | 12 months from date of despatch | | | |
| Health And Safety Information | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1075F 10041 | | | |
| Regulatory | For research purposes only | | | |

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)

HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

: +1 919 878 3751

Worldwide

Email: antibody_sales_us@bio-rad.com

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M384761:210513'

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