

Datasheet: MCA1075A647

BATCH NUMBER 1608

| | |
|----------------------|--|
| Description: | MOUSE ANTI HUMAN CD32:Alexa Fluor® 647 |
| Specificity: | CD32 |
| Other names: | FcR11 |
| Format: | ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | AT10 |
| Isotype: | IgG1 |
| Quantity: | 100 TESTS/1ml |

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.

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 Alexa Fluor®647- liquid

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------|-----------------|---------------------|-------------------|
| | Alexa Fluor®647 | 650 | 665 |

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

| | |
|---------------------------------------|--|
| Preservative Stabilisers | 0.09% Sodium Azide 1% Bovine Serum Albumin |
| Approx. Protein Concentrations | IgG concentration 0.05 mg/ml |
| 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_324766 |
| 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.](#)

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. This product is photosensitive and should be protected from light.

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

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1075A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

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

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)

'M364732:200529'

Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)