

## Datasheet: MCA1075EL

|                      |                                     |
|----------------------|-------------------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD32:Low Endotoxin |
| <b>Specificity:</b>  | CD32                                |
| <b>Other names:</b>  | FcRII                               |
| <b>Format:</b>       | Low Endotoxin                       |
| <b>Product Type:</b> | Monoclonal Antibody                 |
| <b>Clone:</b>        | AT10                                |
| <b>Isotype:</b>      | IgG1                                |
| <b>Quantity:</b>     | 0.5 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            | ▪   |    |                |                    |

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.**

|                                 |  |
|---------------------------------|--|
| <b>Target Species</b>           | Human  |
| <b>Species Cross Reactivity</b> | Reacts with: Dog, Rhesus Monkey, Pig<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |
| <b>Product Form</b>             | Purified IgG - liquid  |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography on Protein A  |
| <b>Buffer Solution</b>          | Phosphate buffered saline  |
| <b>Preservative Stabilisers</b> | None present   |

|  |  |
|--|--|
| <b>Endotoxin Level</b>                   | <0.01EU/ug   |
| <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>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). The antigen mediates several functions including endocytosis, activation of secretion, cytotoxicity and immunomodulation. CD32 is expressed by B cells, monocytes, granulocytes and platelets.</p> <p>Clone AT10 blocks the binding of IgG to Fc gamma RII (<a href="#">Larsson et al. 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 Control Tissue</b> | Lymph node   |
| <b>References</b>                        | <ol style="list-style-type: none"> <li>Greenman, J. <i>et al.</i> (1991) Characterization of a new monoclonal anti-Fc gamma RII antibody, AT10, and its incorporation into a bispecific F(ab')<sub>2</sub> derivative for recruitment of cytotoxic effectors. <a href="#">Mol Immunol. 28 (11): 1243-54.</a></li> <li>Van Den Herik-Oudijk, I.E. <i>et al.</i> (1994) Functional analysis of human Fc gamma RII (CD32) isoforms expressed in B lymphocytes. <a href="#">J Immunol. 152 (2): 574-85.</a></li> <li>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. <a href="#">Vet Immunol Immunopathol. 61 (2-4): 181-93.</a></li> <li>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>. <a href="#">Immunology. 90 (1): 138-46.</a></li> <li>Dutertre, C.A. <i>et al.</i> (2008) A novel subset of NK cells expressing high levels of inhibitory Fc gammaRIIB modulating antibody-dependent function. <a href="#">J Leukoc Biol. 84 (6): 1511-20.</a></li> <li>Devriendt, B. <i>et al.</i> (2010) Targeting of <i>Escherichia coli</i> F4 fimbriae to Fc gamma receptors enhances the maturation of porcine dendritic cells. <a href="#">Vet Immunol Immunopathol. 135: 188-98.</a></li> <li>Sims, G.P. <i>et al.</i> (2005) Identification and characterization of circulating human transitional B cells. <a href="#">Blood. 105: 4390-8.</a></li> </ol> |

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17. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with Fc $\gamma$ 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.](#)

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|--------------------------------------|---|
| <b>Storage</b>                       | <p>Store at -20°C only.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p> |
| <b>Shelf Life</b>                    | 12 months from date of despatch.  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10162 available at: 10162: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf</a>   |
| <b>Regulatory</b>                    | For research purposes only  |

## Related Products

### Recommended Secondary Antibodies

|   |   |
|---|---|
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@549</a> ,<br><a href="#">DyLight@649</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Human Anti Mouse IgG1 (HCA036...) [HRP](#)

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA928EL\)](#)

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