

## Datasheet: MCA1053GT

|                      |                       |
|----------------------|-----------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD48 |
| <b>Specificity:</b>  | CD48                  |
| <b>Other names:</b>  | BLAST-1               |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | MEM-102               |
| <b>Isotype:</b>      | IgG1                  |
| <b>Quantity:</b>     | 25 µg                 |

## 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             | ■   |    |                |                    |
| Immunohistology - Frozen   | ■   |    |                | 1/50 - 1/100       |
| Immunohistology - Paraffin | ■   |    |                |                    |
| ELISA                      |     |    | ■              |                    |
| Immunoprecipitation        |     |    | ■              |                    |
| Western Blotting (1)       | ■   |    |                |                    |
| Immunofluorescence         | ■   |    |                |                    |

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) **This product recognizes CD48 under non-reducing conditions.**

|                                       |                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Human                                                                                                          |
| <b>Species Cross Reactivity</b>       | Reacts with: Rhesus Monkey<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 G                                                  |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                                                      |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide                                                                                             |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                                                    |

**External Database  
Links**

**UniProt:**

[P09326](#)

[Related reagents](#)

**Entrez Gene:**

[962](#)

CD48

[Related reagents](#)

**Synonyms**

BCM1, BLAST1

**Specificity**

**Mouse anti Human CD48 antibody, clone MEM-102** recognizes to the 45kDa leucocyte surface glycoprotein specific for the CD48 antigen which is closely related to the activation antigen, Blast-1.

Mouse anti Human CD48 antibody, clone MEM-102 is useful in the detection of CD48 positive cells and may be used in studies to differentiate haemopoietic tumors, sarcomas and melanomas.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul

**Immunohistology**

This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.

**Histology Positive  
Control Tissue**

Tonsil

**References**

1. Horejsí, V. *et al.* (1988) Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74). [Folia Biol \(Praha\). 34 \(1\): 23-34.](#)
2. Korínek, V. *et al.* (1991) The human leucocyte antigen CD48 (MEM-102) is closely related to the activation marker Blast-1. [Immunogenetics. 33 \(2\): 108-12.](#)
3. Cinek, T. & Horejsí, V. (1992) The nature of large noncovalent complexes containing glycosyl-phosphatidylinositol-anchored membrane glycoproteins and protein tyrosine kinases. [J Immunol. 149 \(7\): 2262-70.](#)
4. Staffler, G. *et al.* (2003) Selective inhibition of T cell activation via CD147 through novel modulation of lipid rafts. [J Immunol. 171 \(4\): 1707-14.](#)
5. Larochelle, A. *et al.* (2011) Human and rhesus macaque hematopoietic stem cells cannot be purified based only on SLAM family markers. [Blood. 117:1550-4.](#)
6. Enose-Akahata, Y. *et al.* (2009) High expression of CD244 and SAP regulated CD8 T cell responses of patients with HTLV-I associated neurologic disease. [PLoS Pathog. 5: e1000682.](#)
7. Fukushima, K. *et al.* (2005) Functional role played by the glycosylphosphatidylinositol anchor glycan of CD48 in interleukin-18-induced interferon-gamma production. [J Biol Chem. 280: 18056-62.](#)
8. Kanuga, N. *et al.* (2002) Characterization of genetically modified human retinal pigment epithelial cells developed for in vitro and transplantation studies. [Invest Ophthalmol Vis Sci. 43: 546-55.](#)

**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.

**Shelf Life**

18 months from date of despatch.

|                                      |                                                                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br>10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.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...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |
| Rabbit Anti Mouse IgG (STAR8...)        | <a href="#">DyLight®800</a>                                                                                                                                                                                                         |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Human Anti Mouse IgG1 (HCA036...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <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> |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|

'M293143:160810'

Printed on 02 May 2018