

## Datasheet: MCA2078PE

| Description:  | RAT ANTI MOUSE CD120a:RPE |  |  |  |  |
|---------------|---------------------------|--|--|--|--|
| Specificity:  | CD120a                    |  |  |  |  |
| Other names:  | TNF RECEPTOR TYPE I       |  |  |  |  |
| Format:       | RPE                       |  |  |  |  |
| Product Type: | Monoclonal Antibody       |  |  |  |  |
| Clone:        | HM104                     |  |  |  |  |
| Isotype:      | lgG2a                     |  |  |  |  |
| Quantity:     | 100 TESTS                 |  |  |  |  |
|               |                           |  |  |  |  |

## **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 <u>www.bio-</u><br>rad-antibodies.com/protocols.   |                   |        |                   |                    |  |  |  |
|                             |  | Yes               | No     | Not Determined    | Suggested Dilution |  |  |  |
|                             | Flow Cytometry   | -                 |        |                   | Neat               |  |  |  |
|                             | Where this product has not been tested for use in a particular technique this does   |                   |        |                   |                    |  |  |  |
|                             | necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.                                |                   |        |                   |                    |  |  |  |
| Target Species              | Mouse  |                   |        |                   |                    |  |  |  |
| Product Form                | Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid   |                   |        |                   |                    |  |  |  |
| Max Ex/Em                   | Fluorophore  | Excitation Max    | c (nm) | Emission Max (nm) |                    |  |  |  |
|                             | RPE 488nm laser  | 496               |        | 578               |                    |  |  |  |
| Preparation                 | Purified IgG prepared by ion exchange chromatography from ascites  |                   |        |                   |                    |  |  |  |
| Buffer Solution             | Phosphate buffered saline  |                   |        |                   |                    |  |  |  |
| Preservative<br>Stabilisers | <0.1% sodium azide (NaN <sub>3</sub> )<br>0.2% bovine serum albumin  |                   |        |                   |                    |  |  |  |
| External Database<br>Links  | UniProt:<br>P25118 Related   | <u>l reagents</u> |        |                   |                    |  |  |  |

|                                  | Entrez Gene:<br><u>21937</u> Tnfrsf1a <u>Related reagents</u>  |  |  |  |  |
|----------------------------------|--|--|--|--|--|
| Synonyms                         | Tnfr1, Tnfr-1  |  |  |  |  |
| RRID                             | AB_323589  |  |  |  |  |
| Specificity                      | <b>Rat anti Mouse CD120a antibody, clone HM104</b> recognizes an extracellular region of mouse CD120a, also known as TNF receptor type I (TNFR1). TNFR1 is an ubiquitously expressed transmembrane glycoprotein and member of the tumor necrosis factor receptor (TNFR) superfamily, which plays a key role in regulating the inflammatory response, acting as a receptor for tumor necrosis factor alpha (TNF-alpha) and lymphotoxin-alpha (TNF-beta).  |  |  |  |  |
|                                  | CD120a also plays a role in apoptosis, cytokine induction, cell differentiation, tumor necrosis and early stages of graft-versus-host disease, and its soluble form sTNFR1, acts as an inhibitor of TNF-alpha induced responses by acting as a decoy receptor.   |  |  |  |  |
| Flow Cytometry                   | Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl.<br>The Fc region of monoclonal antibodies may bind to cells expressing low affinity fc<br>receptors. This may be reduced by using SeroBlock FcR ( <u>BUF041A/BUF041B</u> ).  |  |  |  |  |
| References                       | <ol> <li>Pearl-Yafe, M. <i>et al.</i> (2010) Tumor necrosis factor receptors support murine<br/>hematopoietic progenitor function in the early stages of engraftment. <u>Stem Cells. 28 (7):</u><br/><u>1270-80.</u></li> <li>Nakagawa, J. <i>et al.</i> (2007) TNF expressed by tumor-associated macrophages, but not<br/>microglia, can eliminate glioma. <u>Int J Oncol. 30 (4): 803-11.</u></li> <li>Li, P. <i>et al.</i> (2023) TNFR2 deficiency impairs the growth of mouse colon cancer <u>Int J<br/>Biol Sci.19 (4): 1024-35.</u></li> </ol> |  |  |  |  |
| Storage                          | Store at +4°C.<br>DO NOT FREEZE.<br>This product should be stored undiluted. This product is photosensitive and should be<br>protected from light. Should this product contain a precipitate we recommend<br>microcentrifugation before use.   |  |  |  |  |
| Guarantee                        | 6 months from date of despatch   |  |  |  |  |
| Health And Safety<br>Information | Material Safety Datasheet documentation #10041 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA2078PE<br>10041  |  |  |  |  |
| Regulatory                       | For research purposes only   |  |  |  |  |

# **Related Products**

## **Recommended Negative Controls**

| North & South | Tel: +1 800 265 7376            | Worldwide | Tel: +44 (0)1865 852 700      | Europe   | Tel: +49 (0) 89 8090 95 21           |
|---------------|---------------------------------|-----------|-------------------------------|----------|--------------------------------------|
| America       | Fax: +1 919 878 3751            |           | Fax: +44 (0)1865 852 739      |          | Fax: +49 (0) 89 8090 95 50           |
|               | Email: antibody_sales_us@bio-ra | id.com    | Email: antibody_sales_uk@bio- | -rad.com | 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 'M412748:221116'

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