

## Datasheet: MCA2287

|                      |                          |
|----------------------|--------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE NKG2A/C/E |
| <b>Specificity:</b>  | NKG2A/C/E                |
| <b>Format:</b>       | Purified                 |
| <b>Product Type:</b> | Monoclonal Antibody      |
| <b>Clone:</b>        | 20d5                     |
| <b>Isotype:</b>      | IgG2a                    |
| <b>Quantity:</b>     | 0.25 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             | ■   |    |                | 1/25 - 1/100       |
| Immunohistology - Frozen   |     |    | ■              |                    |
| Immunohistology - Paraffin |     |    | ■              |                    |
| ELISA                      |     |    | ■              |                    |
| Immunoprecipitation        |     |    | ■              |                    |
| Western Blotting           |     |    | ■              |                    |

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.

|                                       |                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Mouse                                                                                         |
| <b>Product Form</b>                   | Purified IgG - liquid                                                                         |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                                     |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide                                                                            |
| <b>Carrier Free</b>                   | Yes                                                                                           |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                                   |
| <b>Immunogen</b>                      | CHO transfected cells expressing the B6 allele of NKG2A.                                      |
| <b>Fusion Partners</b>                | Spleen cells from immunised Lewis rats were fused with cells of the mouse P3X63-Ag8.653       |

myeloma cell line.

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b>                   | <p><b>Rat anti Mouse NKG2A/C/E antibody, clone 20d5</b> recognizes murine NKG2A, NKG2C and NKG2E, which are isoforms of the NKG2 lectin-like family. In mice, NKG2 subunits associate with CD94 to form heterodimers at the surface of natural killer (NK) cells.</p> <p>The CD94/NKG2 heterodimer is the receptor for a non-classical MHC class I ligand, which is Qa-1 in the mouse (<a href="#">Colmenero et al. 2007</a>).</p> <p>Rat anti Mouse NKG2A/C/E, clone 20d5 is reported to block ligand binding to the receptor (<a href="#">Vance et al. 1999</a>)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Flow Cytometry</b>                | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>References</b>                    | <ol style="list-style-type: none"><li>1. Vance, R.E. <i>et al.</i> (1999) Recognition of the class Ib molecule Qa-1(b) by putative activating receptors CD94/NKG2C and CD94/NKG2E on mouse natural killer cells. <a href="#">J Exp Med. 190 (12): 1801-12.</a></li><li>2. Vance, R.E. <i>et al.</i> (2002) Implications of CD94 deficiency and monoallelic NKG2A expression for natural killer cell development and repertoire formation. <a href="#">Proc Natl Acad Sci U S A. 99 (2): 868-73.</a></li><li>3. Kawamura, H. <i>et al.</i> (2005) Amelioration of acute graft-versus-host disease by NKG2A engagement on donor T cells. <a href="#">Eur J Immunol. 35 (8): 2358-66.</a></li><li>4. Yin, Y. <i>et al.</i> (2013) Phosphatidylserine-targeting antibody induces M1 macrophage polarization and promotes myeloid-derived suppressor cell differentiation. <a href="#">Cancer Immunol Res. 1 (4): 256-68.</a></li><li>5. Colmenero, P. <i>et al.</i> (2007) Qa-1(b)-dependent modulation of dendritic cell and NK cell cross-talk in vivo. <a href="#">J Immunol. 179: 4608-15.</a></li></ol> |
| <b>Storage</b>                       | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at: 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

|                                                |                                                                                         |
|------------------------------------------------|-----------------------------------------------------------------------------------------|
| Rabbit Anti Rat IgG (STAR16...)                | <a href="#">DyLight®800</a>                                                             |
| Goat Anti Rat IgG (STAR73...)                  | <a href="#">RPE</a>                                                                     |
| Rabbit Anti Rat IgG (STAR21...)                | <a href="#">HRP</a>                                                                     |
| Rabbit Anti Rat IgG (STAR17...)                | <a href="#">FITC</a>                                                                    |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | <a href="#">DyLight®549</a> , <a href="#">DyLight®649</a> , <a href="#">DyLight®800</a> |
| Goat Anti Rat IgG (STAR131...)                 | <a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>                                     |
| Goat Anti Rat IgG (STAR69...)                  | <a href="#">FITC</a>                                                                    |
| Goat Anti Rat IgG (STAR72...)                  | <a href="#">HRP</a>                                                                     |

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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