

## Datasheet: MCA351G

|                      |                     |
|----------------------|---------------------|
| <b>Description:</b>  | RAT ANTI HUMAN CD8  |
| <b>Specificity:</b>  | CD8                 |
| <b>Format:</b>       | Purified            |
| <b>Product Type:</b> | Monoclonal Antibody |
| <b>Clone:</b>        | YTC182.20           |
| <b>Isotype:</b>      | IgG2b               |
| <b>Quantity:</b>     | 0.2 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             | ■   |    |                | 1/100 - 1/200      |
| Immunohistology - Frozen   | ■   |    |                |                    |
| Immunohistology - Paraffin |     |    | ■              |                    |
| ELISA                      |     |    | ■              |                    |
| Immunoprecipitation        |     |    | ■              |                    |
| Western Blotting           |     |    | ■              |                    |
| 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.

|                                       |                                                                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Human                                                                                                                             |
| <b>Species Cross Reactivity</b>       | Reacts with: Cynomolgus monkey, 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 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> | Ig concentration 1.0mg/ml                                                                                                         |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen</b>               | Mouse L cells transfected with human CD8 gene.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>External Database Links</b> | <p><b>UniProt:</b></p> <p><a href="#">P01732</a> <a href="#">Related reagents</a></p> <p><a href="#">P10966</a> <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">925</a> CD8A <a href="#">Related reagents</a></p> <p><a href="#">926</a> CD8B <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>                | CD8B1, MAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Fusion Partners</b>         | Spleen cells from an immunised DA rat were fused with cells of the rat Y3/Ag.1.2.3 myeloma line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Specificity</b>             | <b>Rat anti Human CD8 antibody, clone YTC182.20</b> recognizes the human CD8 cell surface antigen, a ~30/32 kDa glycoprotein expressed by the cytotoxic/suppressor subset of T lymphocytes, and more weakly by NK cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <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. Jonker, M. <i>et al.</i> (1989) Reactivity of mAb specific for human CD markers with Rhesus monkey leucocytes. Leucocyte Typing IV. Oxford University Press p 1058-1063.</li> <li>2. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. <a href="#">Exp Anim. 49 (2): 97-110.</a></li> <li>3. Walton, L.J. <i>et al.</i> (1998) Intra-epithelial subpopulations of T lymphocytes and Langerhans cells in oral lichen planus. <a href="#">J Oral Pathol Med. 27 (3): 116-23.</a></li> <li>4. Shacklett, B.L. <i>et al.</i> (2004) Abundant expression of granzyme A, but not perforin, in granules of CD8+ T cells in GALT: implications for immune control of HIV-1 infection. <a href="#">J Immunol. 173 (1): 641-8.</a></li> <li>5. Wang, H. <i>et al.</i> (2016) Assessment of placental transfer and the effect on embryo-fetal development of a humanized monoclonal antibody targeting lymphotoxin-alpha in non-human primates. <a href="#">Reprod Toxicol. 63: 82-95.</a></li> <li>6. Salajegheh, M. <i>et al.</i> (2007) T cell receptor profiling in muscle and blood lymphocytes in sporadic inclusion body myositis. <a href="#">Neurology. 69 (17): 1672-9.</a></li> <li>7. Salajegheh, M. <i>et al.</i> (2007) Upregulation of thrombospondin-1(TSP-1) and its binding partners, CD36 and CD47, in sporadic inclusion body myositis. <a href="#">J Neuroimmunol. 187 (1-2): 166-74.</a></li> <li>8. Sasikala-Appukuttan, A.K. <i>et al.</i> (2013) Location and dynamics of the immunodominant CD8 T cell response to SIVΔnef immunization and SIVmac251 vaginal challenge. <a href="#">PLoS One. 8 (12): e81623.</a></li> <li>9. VanNierop, G.P. <i>et al.</i> (2017) Phenotypic and functional characterization of T cells in white matter lesions of multiple sclerosis patients. <a href="#">Acta Neuropathol. Jun 17 [Epub ahead of print].</a></li> <li>10. Cramer, M.L. <i>et al.</i> (2017) Induction of T-Cell Infiltration and Programmed Death Ligand 2 Expression by Adeno-Associated Virus in Rhesus Macaque Skeletal Muscle and Modulation by Prednisone. <a href="#">Hum Gene Ther. 28 (6): 493-509.</a></li> </ol> |
| <b>Storage</b>                 | <p>Store at +4°C or at -20°C if preferred.</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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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| <b>Shelf Life</b>                    | 12 months from date of despatch.                                                                                                                                                                         |
| <b>Acknowledgements</b>              | The isolation and characterisation of this cell line was carried out with the help of funds supplied by the Medical Research Council, United kingdom.                                                    |
| <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

|                                                |                                                                                         |
|------------------------------------------------|-----------------------------------------------------------------------------------------|
| 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 IgG2b NEGATIVE CONTROL \(MCA6006GA\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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