

## Datasheet: MCA1723

|                      |                           |
|----------------------|---------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD8 BETA |
| <b>Specificity:</b>  | CD8 BETA                  |
| <b>Format:</b>       | Purified                  |
| <b>Product Type:</b> | Monoclonal Antibody       |
| <b>Clone:</b>        | 2ST8.5H7                  |
| <b>Isotype:</b>      | IgG2a                     |
| <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             | ■   |    |                | Neat - 1/10        |
| 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.

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|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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 - lyophilised                                                                                                                                                                                                                                                                                                                                 |
| <b>Reconstitution</b>           | Reconstitute with 0.2ml distilled water<br>Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.<br>N.B. For functional studies do not add sodium azide |
| <b>Preparation</b>              | Purified IgG prepared from ascites                                                                                                                                                                                                                                                                                                                         |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                                                                                                                                                                                                                                                                                                  |
| <b>Preservative Stabilisers</b> | 1% Bovine Serum Albumin                                                                                                                                                                                                                                                                                                                                    |

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Immunogen</b>                      | Normal human T lymphocytes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">P10966</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">926</a>   CD8B   <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Synonyms</b>                       | CD8B1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Fusion Partners</b>                | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specificity</b>                    | <p><b>Mouse anti Human CD8 beta antibody, clone 2ST8.5H7</b> recognizes the human CD8 cell surface antigen. The antibody binds to the beta chain, recognising an epitope that is dependent upon expression of both CD8 alpha and CD8 beta.</p> <p>CD8 molecules are composed of dimers of either alpha/alpha or alpha/beta polypeptide combinations. Both types of dimer may co-exist at the cell surface.</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. Terry, L.A. <i>et al.</i> (1990) Differential expression and regulation of the human CD8 alpha and CD8 beta chains. <a href="#">Tissue Antigens 35: 82-91.</a></li> <li>2. DiSanto, J.P. <i>et al.</i> (1991) Generation of anti-human CD8 beta-specific antibodies using transfectants expressing mixed-species CD8 heterodimers. <a href="#">J Immunol Methods. 141 (1): 123-31.</a></li> <li>3. de la Calle-Martin, O. <i>et al.</i> (2001) Familial CD8 deficiency due to a mutation in the CD8 alpha gene. <a href="#">J Clin Invest. 108: 117-23.</a></li> <li>4. Fry, T.J. <i>et al.</i> (2002) IL-7 therapy dramatically alters peripheral T-cell homeostasis in normal and SIV-infected nonhuman primates. <a href="#">Blood. 101: 2294-9.</a></li> <li>5. Schmitz, J.E. <i>et al</i> (1998) Expression of the CD8alpha beta-heterodimer on CD8(+) T lymphocytes in peripheral blood lymphocytes of human immunodeficiency virus- and human immunodeficiency virus+ individuals. <a href="#">Blood. 92: 198-206.</a></li> </ol> |
| <b>Storage</b>                        | <p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at -20°C.</p> <p>Storage in frost-free freezers is not recommended. 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>                     | Please see label for expiry date.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Health And Safety Information</b>  | <p>Material Safety Datasheet documentation available at:<br/> Material Safety Datasheet Documentation #10294 available at:<br/> <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10294.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10294.pdf</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <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>                                                                                                                                                                                    |
| Rabbit Anti Mouse IgG (STAR13...)       | <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>                                                                                                                                                                                                                |
| Human Anti Mouse IgG2a (HCA037...)      | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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