

## Datasheet: TZA0160GA

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|----------------------|-----------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD45.2 |
| <b>Specificity:</b>  | CD45.2                |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | r104-2                |
| <b>Isotype:</b>      | IgG2a                 |
| <b>Quantity:</b>     | 0.1 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 | ■   |    |                |                    |

Where this product 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 product for use in their own system using appropriate negative/positive controls.

|                                       |                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Mouse                                                                                               |
| <b>Product Form</b>                   | Purified recombinant IgG containing a SpyTag at the C-terminus of the antibody heavy chain – liquid |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant       |
| <b>Source</b>                         | CHO cells                                                                                           |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                                           |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                              |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                                         |
| <b>Immunogen</b>                      | thymocytes and splenocytes from B10.S mice                                                          |

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|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>External Database Links</b>       | <b>UniProt:</b><br><a href="#">P06800</a> <a href="#">Related reagents</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                      | <b>Entrez Gene:</b><br><a href="#">19264</a> Ptpnc <a href="#">Related reagents</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>                      | Ly-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Specificity</b>                   | <p><b>Rat anti Mouse CD45.2 antibody, clone r104-2</b>, is a recombinant monoclonal antibody that recognizes mCD45.2, also known as Ly5.2.</p> <p>CD45.2 is an alloantigen of CD45, a type I transmembrane protein tyrosine kinase exclusively expressed on all nucleated cells of the hematopoietic system. CD45.2 is the predominant alloantigen in mice, expressed by leukocytes of most mouse strains, including A, AKR, BALB/c, CBA/Ca, CBA/J, C3H/He, C57BL, C57BR, C57L, C58, DBA/1, DBA/2, NZB, SWR, and 129. CD45 and its isoforms have a key role in initiating T cell receptor signaling by controlling the activation of Src family protein-tyrosine kinases Lck and Fyn. Ultimately this leads to increased cytokine production and proliferation of T cells. The CD45.2 alloantigen in mice differs from the CD45.1 alloantigen by only five amino acids in the extracellular domain (<a href="#">Zebedee 1991</a>).</p> <p>CD45.2 and CD45.1 antibodies are used to track hematopoietic donor cells following mouse bone marrow transplant.</p> <p>Rat anti Mouse CD45.2, clone r104-2, is derived from clone 104-2, generated by cloning the variable DNA sequences into expression vectors for recombinant protein expression.</p> |
| <b>Flow Cytometry</b>                | Use 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage</b>                       | <p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Guarantee</b>                     | 12 months from date of despatch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Acknowledgements</b>              | This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA0160GA">https://www.bio-rad-antibodies.com/SDS/TZA0160GA</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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## Related Products

### Recommended Secondary Antibodies

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|------------------------------------------------|-----------------------------------------------------------------------------------------|
| Rabbit Anti Rat IgG (STAR16...)                | <a href="#">DyLight®800</a>                                                             |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a> |
| Goat Anti Rat IgG (STAR73...)                  | <a href="#">RPE</a>                                                                     |
| Goat Anti Rat IgG (STAR131...)                 | <a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>                                     |
| Rabbit Anti Rat IgG (STAR21...)                | <a href="#">HRP</a>                                                                     |
| Rabbit Anti Rat IgG (STAR17...)                | <a href="#">FITC</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 \(MCA1212\)](#)

Product inquiries: [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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