

## Datasheet: MCA609PE

|                      |                              |
|----------------------|------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE CD8 ALPHA:RPE |
| <b>Specificity:</b>  | CD8 ALPHA                    |
| <b>Other names:</b>  | LY-2                         |
| <b>Format:</b>       | RPE                          |
| <b>Product Type:</b> | Monoclonal Antibody          |
| <b>Clone:</b>        | KT15                         |
| <b>Isotype:</b>      | IgG2a                        |
| <b>Quantity:</b>     | 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ■   |    |                | Neat - 1/10        |

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.

|                 |                                                                 |                      |                   |
|-----------------|-----------------------------------------------------------------|----------------------|-------------------|
| Target Species  | Mouse                                                           |                      |                   |
| Product Form    | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized |                      |                   |
| Reconstitution  | Reconstitute with 1 ml distilled water                          |                      |                   |
| Max Ex/Em       | Fluorophore                                                     | Excitation Max (nm)  | Emission Max (nm) |
|                 | RPE 488nm laser                                                 | 496                  | 578               |
| Buffer Solution | Phosphate buffered saline                                       |                      |                   |
| Preservative    | 0.09% Sodium Azide                                              |                      |                   |
| Stabilisers     | 1%                                                              | Bovine Serum Albumin |                   |
|                 | 5%                                                              | Sucrose              |                   |
| Immunogen       | T cell clone, C6                                                |                      |                   |

### External Database Links

#### UniProt:

[P01731](#) [Related reagents](#)

#### Entrez Gene:

[12525](#) Cd8a [Related reagents](#)

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>        | Lyt2, Lyt-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Fusion Partners</b> | Spleen cells from immunised SD rats were fused with cells of the NS0 mouse myeloma cell line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specificity</b>     | <p><b>Rat anti mouse CD8α, clone KT15</b>, recognizes the <a href="#">alpha chain of mouse CD8</a>. CD8 is a heterodimeric protein composed of disulphide-linked CD8α and <a href="#">CD8β</a> chains that is expressed primarily on cytotoxic T-cells. CD8 functions in the interaction with MHC Class I-bearing targets and plays a role in T-cell-mediated killing (<a href="#">Nakauchi, H. et al., 1985</a> &amp; <a href="#">Nakauchi, H. et al., 1987</a>).</p> <p>Clone KT15 is reported to block T-cell-mediated cytotoxicity in <i>in vitro</i> assays (<a href="#">Zeis, M. et al., 2002</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Flow Cytometry</b>  | <p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A/B</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>References</b>      | <ol style="list-style-type: none"> <li>1. Tomonari, K. &amp; Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. <a href="#">Immunogenetics. 28 (6): 445-51.</a></li> <li>2. Whiteland, J.L. et al. (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>3. Lee, Y.L. et al (2003) Oral administration of Agaricus blazei (H1 strain) inhibited tumor growth in a sarcoma 180 inoculation model. <a href="#">Exp Anim. 52: 371-5.</a></li> <li>4. Eller, K. et al. (2011) IL-9 production by regulatory T cells recruits mast cells that are essential for regulatory T cell-induced immune suppression. <a href="#">J Immunol. 186: 83-91.</a></li> <li>5. Grimm, M. et al. (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. <a href="#">BMC Cancer. 10: 82.</a></li> <li>6. Liao, D. et al. (2009) Cancer Associated Fibroblasts Promote Tumor Growth and Metastasis by Modulating the Tumor Immune Microenvironment in a 4T1 Murine Breast Cancer Model <a href="#">PLoS One. 4: e7965.</a></li> <li>7. Moos, M.P. et al. (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed apolipoprotein E-deficient mice. <a href="#">Arterioscler Thromb Vasc Biol. 25: 2386-91.</a></li> <li>8. Stevenson, P.G. et al. (2002) Uncoupling of virus-induced inflammation and anti-viral immunity in the brain parenchyma. <a href="#">J Gen Virol. 83: 1735-43.</a></li> <li>9. Wang, X. et al. (2011) Quercetin and Bornyl Acetate Regulate T-Lymphocyte Subsets and INF-γ/IL-4 Ratio In Utero in Pregnant Mice. <a href="#">Evid Based Complement Alternat Med. 2011: 745262.</a></li> <li>10. Zeis, M. et al. (2002) Idiotypic protein-pulsed dendritic cells produce strong anti-myeloma effects after syngeneic stem cell transplantation in mice. <a href="#">Bone Marrow Transplant. 29: 213-21.</a></li> <li>11. Ideguchi, M. et al. (2008) Immune or inflammatory response by the host brain suppresses neuronal differentiation of transplanted ES cell-derived neural precursor cells. <a href="#">J Neurosci Res. 86: 1936-43.</a></li> <li>12. Wolf, D. et al. (2005) CD4+CD25+ regulatory T cells inhibit experimental anti-glomerular basement membrane glomerulonephritis in mice. <a href="#">J Am Soc Nephrol. 16: 1360-70.</a></li> <li>13. Severinova, J. et al. (2005) Co-inoculation of Borrelia afzelii with tick salivary gland extract influences distribution of immunocompetent cells in the skin and lymph nodes of mice. <a href="#">Folia Microbiol (Praha). 50: 457-63.</a></li> <li>14. Zaini, J. et al. (2007) OX40 ligand expressed by DCs costimulates NKT and CD4+ Th cell antitumor immunity in mice. <a href="#">J Clin Invest. 117: 3330-8.</a></li> <li>15. Meyer, C. et al. (2011) Chronic inflammation promotes myeloid-derived suppressor cell activation blocking antitumor immunity in transgenic mouse melanoma model. <a href="#">Proc Natl Acad Sci U S A. 108: 17111-6.</a></li> </ol> |

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#### Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

This product should be stored undiluted.

DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

#### Shelf Life

18 months from date of reconstitution.

#### Health And Safety Information

Material Safety Datasheet documentation #10075 available at:  
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

#### Regulatory

For research purposes only

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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