

# Datasheet: MCA1736SBV710

**BATCH NUMBER 64644771**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | MOUSE ANTI PIG CD25:StarBright Violet 710 |
| <b>Specificity:</b>  | CD25                                      |
| <b>Other names:</b>  | IL-2R ALPHA CHAIN                         |
| <b>Format:</b>       | StarBright Violet 710                     |
| <b>Product Type:</b> | Monoclonal Antibody                       |
| <b>Clone:</b>        | K231.3B2                                  |
| <b>Isotype:</b>      | IgG1                                      |
| <b>Quantity:</b>     | 100 TESTS/0.5ml                           |

## 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               |

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.

|                 |                                                                                               |                     |                   |
|-----------------|-----------------------------------------------------------------------------------------------|---------------------|-------------------|
| Target Species  | Pig                                                                                           |                     |                   |
| Product Form    | Purified IgG conjugated to StarBright Violet 710 - liquid                                     |                     |                   |
| Max Ex/Em       | Fluorophore                                                                                   | Excitation Max (nm) | Emission Max (nm) |
|                 | StarBright Violet 710                                                                         | 402                 | 713               |
| Preparation     | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |                     |                   |
| Buffer Solution | Phosphate buffered saline                                                                     |                     |                   |
| Preservative    | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                        |                     |                   |
| Stabilisers     | 1% Bovine Serum Albumin                                                                       |                     |                   |
|                 | 0.1% Pluronic F68                                                                             |                     |                   |
|                 | 0.1% PEG 3350                                                                                 |                     |                   |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen</b>               | Con A activated porcine peripheral blood lymphocytes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>External Database Links</b> | <p><b>UniProt:</b><br/> <a href="#">O02733</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">396814</a>    IL2RA    <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Fusion Partners</b>         | Spleen cells from immunized mice were fused with cells of the mouse P3-X63-Ag.8.653 myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>             | <p><b>Mouse anti Pig CD25, clone K231.3B2</b> recognizes porcine CD25, the alpha chain of the interleukin 2 receptor (IL-2R<math>\alpha</math>), also known as the low affinity Interleukin 2 receptor. The IL-2 receptor exists in three forms, the high affinity heterodimer, the intermediate affinity <math>\beta</math> monomer and the low affinity <math>\alpha</math> monomer configurations. Clone K231.3B2 was clustered as CD25 at the First International Workshop to Define Swine Cluster of Differentiation (CD) Antigens (<a href="#">Lunney et al. 1994</a>).</p> <p>Mouse anti pig CD25, clone K231.3B2 immunoprecipitates a protein of ~65-70 kDa from activated lymphocyte preparations (<a href="#">Bailey et al. 1992</a>).</p> <p>CD25 is a 270 amino acid single pass type I transmembrane glycoprotein containing 2 Sushi domains. Low expression of CD25 is seen on resting peripheral blood mononuclear cells, rapidly up-regulated following stimulation by concanavalin A and phorbol myristate acetate, indicative of its role as an activation antigen (<a href="#">Bullido et al. 1999</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Flow Cytometry</b>          | Use 5 $\mu$ l of the suggested working dilution to label 10 <sup>6</sup> cells in 100 $\mu$ l. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>References</b>              | <ol style="list-style-type: none"> <li>1. Bailey, M. <i>et al.</i> (1992) A monoclonal antibody recognising an epitope associated with pig interleukin-2 receptors. <a href="#">J Immunol Methods. 153 (1-2): 85-91.</a></li> <li>2. Barker, E. <i>et al.</i> (2006) The larynx as an immunological organ: immunological architecture in the pig as a large animal model. <a href="#">Clin Exp Immunol. 143: 6-14.</a></li> <li>3. Silva-Campa, E. <i>et al.</i> (2009) Induction of T helper 3 regulatory cells by dendritic cells infected with porcine reproductive and respiratory syndrome virus. <a href="#">Virology. 387: 373-9.</a></li> <li>4. Silva-Campa, E. <i>et al.</i> (2010) European genotype of porcine reproductive and respiratory syndrome (PRRSV) infects monocyte-derived dendritic cells but does not induce Treg cells. <a href="#">Virology. 396 (2): 264-71.</a></li> <li>5. Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. <a href="#">Res Vet Sci. 91 (3): e68-72.</a></li> <li>6. LeRoith, T. <i>et al.</i> (2011) A modified live PRRSV vaccine and the pathogenic parent strain induce regulatory T cells in pigs naturally infected with <i>Mycoplasma hyopneumoniae</i>. <a href="#">Vet Immunol Immunopathol. 140 (3-4): 312-6.</a></li> <li>7. Kuo, Y.R. <i>et al.</i> (2011) Prolongation of composite tissue allotransplant survival by treatment with bone marrow mesenchymal stem cells is correlated with T-cell regulation in</li> </ol> |

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|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Further Reading               | 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>                                                             |
| Storage                       | Store at +4°C. DO NOT FREEZE.<br>This product should be stored undiluted.                                                                                                            |
| Guarantee                     | 12 months from date of despatch                                                                                                                                                      |
| Acknowledgements              | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts                                                                                      |
| Health And Safety Information | Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1736SBV710">https://www.bio-rad-antibodies.com/SDS/MCA1736SBV710</a> |
| Regulatory                    | For research purposes only                                                                                                                                                           |

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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