

## Datasheet: MCA925PE

**BATCH NUMBER 151258**

<b>Description:</b>	RAT ANTI MOUSE CD48:RPE
<b>Specificity:</b>	CD48
<b>Other names:</b>	BLAST-1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-78
<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 - 1/5

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>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
<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</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						

5% Sucrose

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<b>Immunogen</b>	Recombinant soluble mouse CD48.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P18181</a> <a href="#">Related reagents</a>
	<b>Entrez Gene:</b> <a href="#">12506</a> Cd48 <a href="#">Related reagents</a>

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<b>Synonyms</b>	Bcm-1
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<b>RRID</b>	AB_321441
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<b>Fusion Partners</b>	Spleen cells from immunized AO Rats were fused with cells from the Rat Y3 myeloma cell line.
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<b>Specificity</b>	<p><b>Rat anti Mouse CD48 antibody, clone OX-78</b> recognizes murine CD48 antigen, also known as BCM1 surface antigen, BLAST-1, HM48-1, MRC OX-45 surface antigen, SLAM family member 2. CD48 is a 195 amino acid GPI anchored membrane glycoprotein with an additional 22 amino acid signal peptide and a 23 amino acid propeptide region cleaved in the mature form.</p> <p>Rat anti Mouse CD48 antibody, clone OX-78 labels mouse thymocytes, B and T cells and macrophages. CD48 is a ligand for the mouse CD2 cell surface antigen.</p>
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<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>
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<b>References</b>	<ol style="list-style-type: none"><li>1. Kato, K. <i>et al.</i> (1992) CD48 is a counter-receptor for mouse CD2 and is involved in T cell activation. <a href="#">J Exp Med. 176 (5): 1241-9.</a></li><li>2. Lapaque, N. <i>et al.</i> (2006) Characterization of <i>Brucella abortus</i> lipopolysaccharide macrodomains as mega rafts. <a href="#">Cell Microbiol. 8 (2): 197-206.</a></li><li>3. Kashiwakura, Y. <i>et al.</i> (2013) CD2-mediated regulation of peripheral CD4(+) CD25(+) regulatory T-cell apoptosis accompanied by down-regulation of Bim. <a href="#">Immunology. 139 (1): 48-60.</a></li><li>4. Wild, M.K. <i>et al.</i> (1999) Dependence of T cell antigen recognition on the dimensions of an accessory receptor-ligand complex. <a href="#">J Exp Med. 190: 31-41.</a></li><li>5. Grassinger, J. <i>et al.</i> (2010) Phenotypically identical hemopoietic stem cells isolated from different regions of bone marrow have different biologic potential. <a href="#">Blood. 116 (17): 3185-96.</a></li><li>6. Oh, J. <i>et al.</i> (2018) MARCH1 protects the lipid raft and tetraspanin web from MHCII proteotoxicity in dendritic cells. <a href="#">J Cell Biol. 217 (4): 1395-410.</a></li></ol>
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<b>Storage</b>	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.
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DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA925PE">https://www.bio-rad-antibodies.com/SDS/MCA925PE</a> 20487
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<b>Regulatory</b>	For research purposes only
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## 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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