

## Datasheet: MCA47PE

**BATCH NUMBER INN1708**

<b>Description:</b>	MOUSE ANTI RAT CD90:RPE
<b>Specificity:</b>	CD90
<b>Other names:</b>	THY1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-7
<b>Isotype:</b>	IgG1
<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

Rat

### Species Cross Reactivity

Reacts with: Rabbit, Mouse, Guinea Pig

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

### Reconstitution

Reconstitute with 1.0 ml distilled water

### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

### Preparation

Purified IgG prepared by affinity chromatography on Protein A

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
<b>Immunogen</b>	Rat Thy1 antigen.
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P01830</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">24832</a> Thy1 <a href="#">Related reagents</a>
<b>Synonyms</b>	Thy-1
<b>RRID</b>	AB_321893
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD90 antibody, clone OX-7</b> recognizes rat and CD90, also known as Thy1.1, a GPI-anchored membrane protein containing a single V type Ig-like domain CD90 is expressed on a variety of cell types including thymocytes, neuronal cells, stem cells, immature B cells and connective tissues, CD90 is also expressed in T cells in mice.</p> <p>Since Thy1.1 is a monomorphic determinant in rat but polymorphic in mice, clone MRC OX-7 reacts with Thy1.1 mice e.g. AKR and FVB, but not Thy1.2 mice such as CBA and BALB/c. The affinity of the Fab' of MRC OX-7 for rat Thy1 is <math>3 \times 10^9 \text{m}^{-1}</math> and for mouse Thy1.1 is <math>3 \times 10^8 \text{m}^{-1}</math>(1).</p> <p>Mouse anti rat CD90, clone MRC OX-7 has been demonstrated to promote neurite outgrowths on peripherin-stained sympathetic rat neurons, using fluorescence microscopy (<a href="#">Jeng <i>et al.</i> 1998</a>). Clone OX-7 has also been reported to induce glomerular nephritis in Wistar rats (<a href="#">Tamura <i>et al.</i> 1996</a>).</p> <p>This product is routinely tested in flow cytometry on rat thymocytes.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. Mason, D.W. &amp; Williams, A.F. (1980) The kinetics of antibody binding to membrane antigens in solution and at the cell surface. <a href="#">Biochem J. 187 (1): 1-20.</a></li> <li>2. Campbell, D.G. <i>et al.</i> (1981) Rat brain Thy-1 glycoprotein. The amino acid sequence, disulphide bonds and an unusual hydrophobic region. <a href="#">Biochem J. 195 (1): 15-30.</a></li> <li>3. Bukovský, A. <i>et al.</i> (1983) The localization of Thy-1.1, MRC OX 2 and Ia antigens in the rat ovary and fallopian tube. <a href="#">Immunology. 48 (3): 587-96.</a></li> <li>4. Lee, W.S. <i>et al.</i> (1998) Thy-1, a novel marker for angiogenesis upregulated by</li> </ol>

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**Storage**

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

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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**Guarantee**

6 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA47PE>  
20487

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

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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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