

# Datasheet: MCA90PE

**BATCH NUMBER 0310R**

<b>Description:</b>	MOUSE ANTI HUMAN CD90:RPE
<b>Specificity:</b>	CD90
<b>Other names:</b>	THY1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	F15-42-1
<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

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	Human		
Species Cross Reactivity	Reacts with: Cynomolgus monkey <b>N.B.</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 in 1 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently vortexed after reconstitution and microcentrifuged before use.		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

<b>Preparation</b>	Purified IgG prepared by ion exchange chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
<b>Immunogen</b>	Purified human brain Thy-1.
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P04216</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">7070</a> THY1 <a href="#">Related reagents</a>
<b>RRID</b>	AB_321888
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD90 antibody, clone F15-42-1</b> recognizes the human CD90 cell surface antigen, a ~25 kDa glycoprotein homologous to rat Thy1. The antigen is expressed by a subset of CD34+ve cells in the bone marrow and by prothymocytes within the thymus. CD90 is also expressed extensively within the brain.</p> <p>Mouse anti Human CD90 antibody, clone F15-42-1 is routinely tested in flow cytometry on the MOLT4 cell line.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>McKenzie, J.L. &amp; Fabre, J.W. (1981) Human thy-1: unusual localization and possible functional significance in lymphoid tissues. <a href="#">J Immunol. 126 (3): 843-50.</a></li> <li>Daar, A.S. &amp; Fabre, J.W. (1981) Demonstration with monoclonal antibodies of an unusual mononuclear cell infiltrate and loss of normal epithelial membrane antigens in human breast carcinomas. <a href="#">Lancet. 2 (8244): 434-8.</a></li> <li>Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. <a href="#">PLoS One. 7: e35577.</a></li> <li>Fiegel, H.C. <i>et al.</i> (2004) Stem-like cells in human hepatoblastoma. <a href="#">J Histochem Cytochem. 52 (11): 1495-501.</a></li> <li>Hagood, J.S. <i>et al.</i> (2005) Loss of fibroblast Thy-1 expression correlates with lung fibrogenesis. <a href="#">Am J Pathol. 167 (2): 365-79.</a></li> <li>Diaz-Romero, J. <i>et al.</i> (2008) Immunophenotypic changes of human articular chondrocytes during monolayer culture reflect bona fide dedifferentiation rather than amplification of progenitor cells. <a href="#">J Cell Physiol. 214: 75-83.</a></li> <li>Cox, G. <i>et al.</i> (2011) The use of the reamer-irrigator-aspirator to harvest mesenchymal stem cells. <a href="#">J Bone Joint Surg Br. 93: 517-24.</a></li> </ol>

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<b>Storage</b>	<p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.</p> <p>This product should be stored undiluted.</p> <p>DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA90PE">https://www.bio-rad-antibodies.com/SDS/MCA90PE</a></p> <p>20487</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

<b>North &amp; South America</b>	<p>Tel: +1 800 265 7376</p> <p>Fax: +1 919 878 3751</p> <p>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a></p>	<b>Worldwide</b>	<p>Tel: +44 (0)1865 852 700</p> <p>Fax: +44 (0)1865 852 739</p> <p>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a></p>	<b>Europe</b>	<p>Tel: +49 (0) 89 8090 95 21</p> <p>Fax: +49 (0) 89 8090 95 50</p> <p>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a></p>
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