

Datasheet: MCA47EL

Description:	MOUSE ANTI RAT CD90:Low Endotoxin
Specificity:	CD90
Other names:	THY1
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	OX-7
Isotype:	IgG1
Quantity:	0.5 mg

Product Details

RRID AB_323948

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/40 - 1/80
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			
Immunofluorescence	▪			
Functional Assays			▪	

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.

Product Form Purified IgG - liquid

Preparation Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers None present

Carrier Free	Yes
Endotoxin Level	<0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Rat Thy1 antigen.
External Database Links	<p>UniProt: P01830 Related reagents</p> <p>Entrez Gene: 24832 Thy1 Related reagents</p>
Synonyms	Thy-1
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>Mouse anti Rat CD90 antibody, clone OX-7 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 $3 \times 10^9 \text{m}^{-1}$ and for mouse Thy1.1 is $3 \times 10^8 \text{m}^{-1}$(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 (Jeng <i>et al.</i> 1998). Clone OX-7 has also been reported to induce glomerular nephritis in Wistar rats (Tamura <i>et al.</i> 1996).</p> <p>This product is routinely tested in flow cytometry on rat thymocytes.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	<ol style="list-style-type: none"> Mason, D.W. & Williams, A.F. (1980) The kinetics of antibody binding to membrane antigens in solution and at the cell surface. Biochem J. 187 (1): 1-20. Campbell, D.G. <i>et al.</i> (1981) Rat brain Thy-1 glycoprotein. The amino acid sequence, disulphide bonds and an unusual hydrophobic region. Biochem J. 195 (1): 15-30. 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. Immunology. 48 (3): 587-96. Lee, W.S. <i>et al.</i> (1998) Thy-1, a novel marker for angiogenesis upregulated by inflammatory cytokines. Circ Res. 82 (8): 845-51. Jeng, C.J. <i>et al.</i> (1998) Thy-1 is a component common to multiple populations of synaptic vesicles. J Cell Biol. 140 (3): 685-98. Banerjee, S.A. <i>et al.</i> (1997) An antibody to the tetraspan membrane protein CD9 promotes neurite formation in a partially alpha3beta1 integrin-dependent manner. J Neurosci. 17 (8): 2756-65. Kawachi, H. <i>et al.</i> (1992) Epitope-specific induction of mesangial lesions with proteinuria by a MoAb against mesangial cell surface antigen. Clin Exp Immunol. 88 (3): 399-404.

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Storage

Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...)

[FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...)

[Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),
[DyLight@800](#), [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA1209EL\)](#)

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