

Datasheet: MCA47PE

BATCH NUMBER 167690

Description:	MOUSE ANTI RAT CD90:RPE
Specificity:	CD90
Other names:	THY1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	OX-7
Isotype:	IgG1
Quantity:	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.

	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 from tissue culture

supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin
5% Sucrose

Immunogen Rat Thy1 antigen.

External Database Links

UniProt:
[P01830](#) [Related reagents](#)

Entrez Gene:
[24832](#) Thy1 [Related reagents](#)

Synonyms Thy-1

RRID AB_321893

Fusion Partners Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity **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.

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).

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 *et al.* 1998](#)). Clone OX-7 has also been reported to induce glomerular nephritis in Wistar rats ([Tamura *et al.* 1996](#)).

This product is routinely tested in flow cytometry on rat thymocytes.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells in 100ul

References

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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.

Guarantee 6 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

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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
'M419633:230616'

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