

Datasheet: MCA47A647

| | |
|----------------------|--------------------------------------|
| Description: | MOUSE ANTI RAT CD90:Alexa Fluor® 647 |
| Specificity: | CD90 |
| Other names: | THY1 |
| Format: | ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | OX-7 |
| Isotype: | IgG1 |
| Quantity: | 100 TESTS/1ml |

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 Alexa Fluor® 647 - liquid

Max Ex/Em

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------------|---------------------|-------------------|
| Alexa Fluor®647 | 650 | 665 |

Preparation

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

Buffer Solution

Phosphate buffered saline

| | |
|---------------------------------------|--|
| Preservative Stabilisers | 0.09% Sodium Azide 1% Bovine Serum Albumin |
| Approx. Protein Concentrations | IgG concentration 0.05 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 |
| RRID | AB_321198 |
| 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 et al. 1998). Clone OX-7 has also been reported to induce glomerular nephritis in Wistar rats (Tamura et al. 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. et al. (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. et al. (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. et al. (1998) Thy-1, a novel marker for angiogenesis upregulated by |

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Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in

frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1209A647\)](#)

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