## Datasheet: MCA47FTT

### Product Details

**Description:** MOUSE ANTI RAT CD90:FITC  
**Specificity:** CD90  
**Other names:** THY1  
**Format:** FITC  
**Product Type:** Monoclonal Antibody  
**Clone:** OX-7  
**Isotype:** IgG1  
**Quantity:** 25 µg

### 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.abdserotec.com/protocols](http://www.abdserotec.com/protocols).

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td></td>
<td></td>
<td></td>
<td>Neat - 1/10</td>
</tr>
</tbody>
</table>

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

### Preparation

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

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

- 0.09% Sodium Azide  
- 1% Bovine Serum Albumin

### Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

### Immunogen

Rat Thy1 antigen.

### External Database Links

**UniProt:**  
[Q01830](https://www.uniprot.org/uniprot/Q01830)  
**Related reagents**

**Entrez Gene:**
### Synonyms
Thy-1

### Fusion Partners
Spleen cells from immunised 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 mice, but not Thy1.2 mice such as CBA and BALB/c. The affinity of the Fab’ of MRC OX-7 for rat Thy1 is $3 \times 10^9$ m$^{-1}$ and for mouse Thy1.1 is $3 \times 10^8$ m$^{-1}$.

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


**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

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

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Shelf Life**

18 months from date of despatch.

**Health And Safety Information**


**Regulatory**

For research purposes only