

# Monoclonal Antibody to CD90 - FITC

Alternate names: CDw90, THY1, Thy-1, Thy-1 membrane glycoprotein

Background: Thy1.1 is expressed on a variety of cell types including thymocytes, neuronal cells, stem

cells, Tlymphocytes (mouse), immature B cells (rat) and connective tissues.

Uniprot ID: P01831

NCBI: NP 033408.1

GenelD: <u>21838</u>

Host / Isotype: Mouse / IgG1

Clone: OX-7

Immunogen: Rat Thy 1 antigen.

Spleen cells of immunised BALB/c mice were fused with cells of the mouse NS1 myeloma

cell line.

**Format:** State: Liquid purified IgG fraction.

Purification: Affinity Chromatography on Protein G

Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as

stabilizer.

Label: FITC - Fluorescein Isothiocyanate Isomer 1

Applications: Flow Cytometry: Use 10 µl of Neat-1/10 diluted antibody to label 10e6 cells in 100 µl.

This product is routinely tested on Rat thymocytes.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognises CD90, also known as Thy1.1. 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.

Clone MRC OX-7 has been demonstrated to promote neurite outgrowths on peripherin-stained sympathetic neurons, using fluorescence microscopy.

Aff. Const. of the Fab' of MRC OX-7 for:

Rat: 3 x 10e9m-1 Mouse: 3 x 10e8m-1

Species: Rat, Mouse, Rabbit and Guinea Pig.

Other species not tested.



## SM049FT: Monoclonal Antibody to CD90 - FITC

### **Storage:**

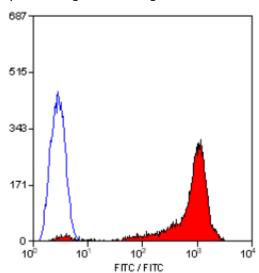
Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

- General References: 1. Mason, D.W. and Williams, A.F. (1980) The Kinetics of antibody binding to membrane antigens in solution and at the cell surface. Biochem.J. 187: 1-20
  - 2. Campbell, D.G. et al. (1981) Rat brain Thy-1 glycoprotein. Biochem. J. 195: 15-30
  - 3. Bukovsky, A. et al. (1983) The localization of Thy-1.1, MRC OX 2 and Ia antigens in the rat ovary and fallopian tube. Immunology. 48:587-595
  - 4. Lee, W. et al. (1998) Thy-1, a novel marker for angiogenesis up regulated by inflammatory cytokines. Circ. Res. 82: 845 - 851.
  - 5. Banerjee, S.A. et al. (1997) An antibody to the tetraspan membrane protein CD9 promotes neurite formation in a partially alpha3beta1 integrin-dependent manner. J. Neurosci. 17: 2756-2765.
  - 6. Kawachi, H. et al. (1992) Epitope-specific induction of mesangial lesions with proteinuria by a MoAb against mesangial cell surface antigen. Clin. Exp. Immunol. 88: 399-404.

#### **Pictures:**



Staining of rat thymus cells with Mouse Anti Rat CD90 (THY-1.1)-FITC