

Monoclonal Antibody to CD90 - Purified

Alternate names:	CDw90, THY1, Thy-1, Thy-1 membrane glycoprotein
Catalog No.:	SM049PT
Quantity:	25 µg
Concentration:	1.0 mg/ml
Background:	Thy1.1 is expressed on a variety of cell types including thymocytes, neuronal cells, stem cells, T lymphocytes (mouse), immature B cells (rat) and connective tissues.
Uniprot ID:	P01831
NCBI:	NP_033408.1
GeneID:	21838
Host / Isotype:	Mouse / IgG1
Clone:	OX-7
Immunogen:	Rat Thy1 antigen. Remarks: Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein G. Buffer System: PBS, pH 7.2 containing 0.09% Sodium Azide as preservative.
Applications:	Western Blot. Immunoprecipitation. Immunohistochemistry on Frozen Sections. Flow Cytometry: Use 10 µl of 1/50-1/100 diluted antibody to label 10e6 cells in 100 µl (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. This clone has been reported to induce glomerular nephritis in Wistar rats (8). Aff. Const. of the Fab' of MRC OX-7 for: Rat: 3 x 10 ⁹ m ⁻¹ Mouse: 3 x 10 ⁸ m ⁻¹ Species: Rat. Cross reacts with Mouse, Rabbit and Guinea Pig. Other species not tested.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

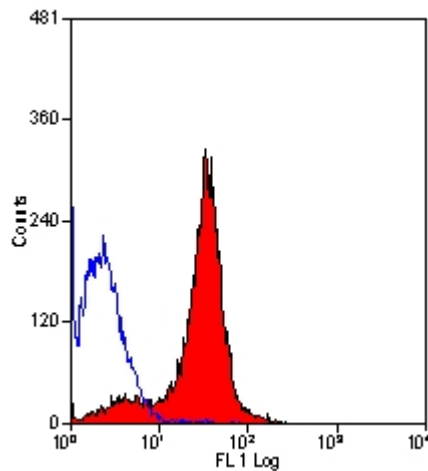
Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. 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. Jeng, C. J. et al. (1998) Thy-1 is a component common to multiple populations of synaptic vesicles. *J. Cell. Biol.* 140(3):685-98.
6. 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.
7. 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.
8. Tamura, M. et al. (1996) Enhanced Glomerular Profilin Gene and Protein Expression in Experimental Mesangial Proliferative Glomerulonephritis. *Biochem Biophys Res Comm.*
9. Stevenson, K.S. et al. (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. *Stem Cells Dev.* 18:1389-98.
10. Biermann, J. et al. (2011) Histone deacetylase inhibitors sodium butyrate and valproic acid delay spontaneous cell death in purified rat retinal ganglion cells. *Mol Vis.* 17: 395-403.

Pictures:



Flow Cytometry: SM049P CD90 Antibody Staining of Rat thymocytes.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com