

## Anti-Rat CD90 Antibody, Clone OX-7, PE



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

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## Antibodies

Mouse monoclonal IgG1 antibody  
against mouse, rat, guinea pig  
CD90/CD90.1, PE-conjugated

Catalog #60024PE  
#60024PE.1

200 µg 0.2 mg/mL  
50 µg 0.2 mg/mL

## Product Description

The OX-7 antibody reacts with rat CD90 (Thy-1) and mouse CD90.1 (Thy-1.1), the latter being an allelic form of CD90 expressed by mouse strains AKR/J, PL, and FVB/N. The OX-7 antibody does not react with CD90.2, which is expressed by many mouse strains, including CBA and BALB/c. CD90 is a GPI-linked membrane glycoprotein and member of the immunoglobulin superfamily. The 25 kDa core protein is N-glycosylated at three sites, giving rise to molecules with a range of molecular masses (25 - 37 kDa). In the rat, CD90 is expressed by several cell types, including hematopoietic stem cells, immature B cells, thymocytes and neurons. In mouse strains expressing CD90.1, it is found on early-stage hematopoietic cells in the bone marrow, thymocytes, and circulating mature T cells. The OX-7 antibody has been reported to induce leukocyte activation, glomerular nephritis, apoptosis in glomerular mesangial cells, and vascular permeability.

Target Antigen Name:	CD90/CD90.1
Alternative Names:	Thy-1, Thy-1.1
Gene ID:	21838/24832
Species Reactivity:	Mouse (AKR/J and PL mouse strains), Rat, Guinea Pig, Rabbit
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	OX-7
Isotype:	IgG1, kappa
Immunogen:	Rat thymocyte CD90 (Thy-1) antigen
Conjugate:	PE

## Applications

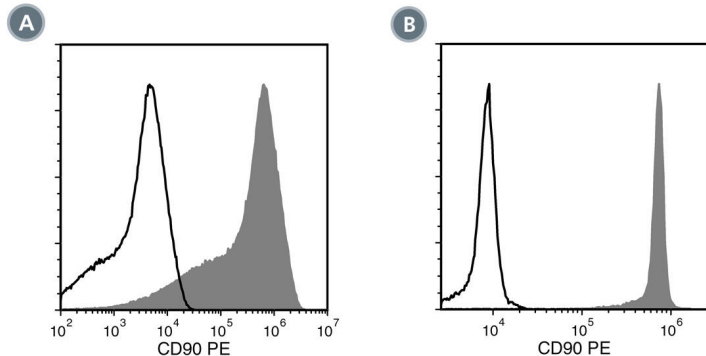
Verified:	FC
Reported:	FC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated from compatible mouse strains with EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 0.25 \mu\text{g}$ per $1 \times 10^6$ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



(A) Flow cytometry analysis of Sprague-Dawley rat brain cells labeled with Anti-Rat CD90 Antibody, Clone OX-7, PE (filled histogram) or a mouse IgG1, kappa PE isotype control antibody (solid line histogram).

(B) Flow cytometry analysis of Sprague-Dawley rat thymocytes labeled with Anti-Rat CD90 Antibody, Clone OX-7, PE (filled histogram) or a mouse IgG1, kappa PE isotype control antibody (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

- Hiramatsu Y et al. (2010) c-Maf activates the promoter and enhancer of the IL-21 gene, and TGF-beta inhibits c-Maf-induced IL-21 production in CD4+ T cells. *J Leukoc Biol* 87(4): 703–12. (FC)
- Dyer KD et al. (2007) Eosinophils from lineage-ablated Delta dblGATA bone marrow progenitors: the dblGATA enhancer in the promoter of GATA-1 is not essential for differentiation ex vivo. *J Immunol* 179(3): 1693–9. (FC)
- Jeng CJ et al. (1998) Thy-1 is a component common to multiple populations of synaptic vesicles. *J Cell Biol* 140(3): 685–98. (IP, WB)
- Dráberová L et al. (1996) Thy-1-mediated activation of rat mast cells: the role of Thy-1 membrane microdomains. *Immunology* 87(1): 141–8. (FA, WB)
- Ishizu A et al. (1995) Thy-1 induced on rat endothelium regulates vascular permeability at sites of inflammation. *Int Immunol* 7(12): 1939–47. (IP)
- 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(3): 399–404. (WB)
- Hermans MH & Opstelten D. (1991) In situ visualization of hemopoietic cell subsets and stromal elements in rat and mouse bone marrow by immunostaining of frozen sections. *J Histochem Cytochem* 39(12): 1627–34. (IHC)
- Nakashima I et al. (1991) Evidence of synergy between Thy-1 and CD3/TCR complex in signal delivery to murine thymocytes for cell death. *J Immunol* 147(4): 1153–62. (FA)
- Paul LC et al. (1984) Thy-1.1 in glomeruli of rat kidneys. *Kidney Int* 25(5): 771–7. (Electron Microscopy, IHC)
- Mason DW & Williams AF. (1980) The kinetics of antibody binding to membrane antigens in solution and at the cell surface. *Biochem J* 187(1): 1–20.

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