

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

### Antibodies

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

Catalog #60024BT

500 µg 0.5 mg/mL



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## 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:	Biotin

## Applications

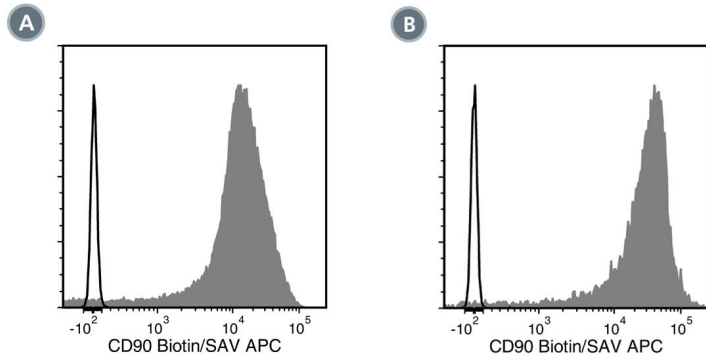
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated from compatible mouse strains with EasySep™ kits, including EasySep™ Mouse T Cell Isolation Kit (Catalog #19851).

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 biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
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, Biotin, followed by streptavidin (SAV) APC (filled histogram), or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, Biotin (Catalog #60070BT), followed by SAV APC (solid line histogram).

(B) Flow cytometry analysis of Sprague-Dawley rat thymocytes labeled with Anti-Rat CD90 Antibody, Clone OX-7, Biotin, followed by SAV APC (filled histogram), or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, Biotin, followed by SAV APC (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

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