

# Product Data Sheet

## Biotin anti-rat CD90/mouse CD90.1 (Thy-1.1)

**Catalog # / Size:** 202510 / 500 µg

**Clone:** OX-7

**Isotype:** Mouse IgG1, κ

**Immunogen:** Rat thymocyte Thy-1 antigen

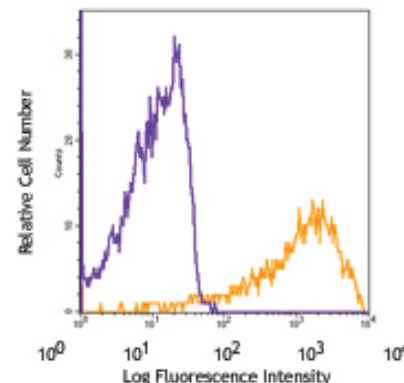
**Reactivity:** Rat, Mouse (AKR/J and PL mouse strains), **Cross-Reactivity:** Rabbit (Lapine), Guinea Pig

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



LOU rat thymocytes stained with OX-7 biotin, followed by Sav-PE

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemistry<sup>1</sup> of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, immunoprecipitation<sup>2</sup>, Western blotting<sup>2</sup>, *in vitro* activation of leukocytes<sup>3</sup>, induction of endothelial cell permeability<sup>4</sup>, induction of glomerulonephritis<sup>5</sup> *in vivo*.

**Application References:**

- Hermans MHA, *et al.* 1991. *J. Histochem. Cytochem.* 39:1627. (IHC)
- Jeng CJ, *et al.* 1998. *J. Cell Biol.* 140:685. (IP, WB)
- Nakashima I, *et al.* 1991. *J. Immunol.* 147:1153.
- Ishizu A, *et al.* 1995. *Int. Immunol.* 7:1939.
- Eitner F. 1997. *Kidney. Int.* 51:69.
- Kawachi H, *et al.* 1992. *Clin. Exp. Immunol.* 88:399.
- Dyer KD, *et al.* 2007. *J. Immunol.* 179:1693. (FC) PubMed
- Hiramatsu Y, *et al.* 2010. *J. Immunol.* 87:703. (FC) PubMed

**Description:** CD90, also known as Thy-1, is a 28-30 kD GPI-linked membrane glycoprotein. It is a member of the immunoglobulin superfamily and has been shown to interact with CD45 in signal transduction during lymphocyte proliferation and differentiation. CD90 is expressed on hematopoietic stem cells, neurons, thymocytes, peripheral T cells, fibroblasts, stromal cells. The OX-7 antibody reacts with rat CD90 and mouse CD90.1 (Thy-1.1) (which is expressed by mouse strains of AKR/J, PL, and FVB/N), but not mouse CD90.2. This antibody has been reported to induce leukocyte activation, vascular permeability, induce apoptosis in glomerular mesangial cells, and induce glomerulonephritis *in vivo*.

**Antigen References:**

- Campbell DG, *et al.* 1981. *Biochem. J.* 195:15.
- Hosseinzadeh H, *et al.* 1993. *J. Immunol.* 150:1670.

### Related Products:

**Product**  
 Biotin Mouse IgG1, κ Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)

**Clone**  
 MOPC-21

**Application**  
 FC, ICFC  
 FC, ICC, ICFC  
 FC, ICFC



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