

**Pacific Blue™ anti-rat CD90/mouse CD90.1 (Thy-1.1)**

**Catalog # / Size:** 1612605 / 25 µg  
1612610 / 100 µg

**Clone:** OX-7

**Isotype:** Mouse IgG1, κ

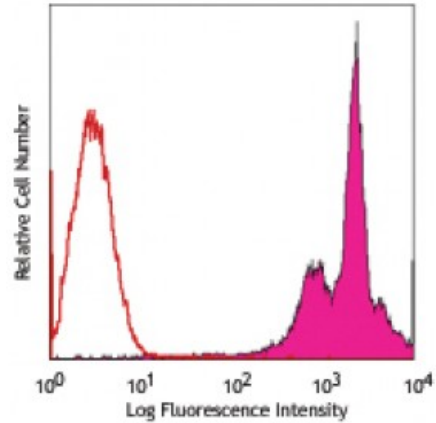
**Immunogen:** Rat thymocyte Thy-1 antigen

**Reactivity:** Other

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

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

**Concentration:** 0.5



LOU rat thymocytes stained with OX-7 Pacific Blue™

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 microg per 10<sup>6</sup> cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** 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.

Additional reported applications (for the relevant formats) include: immunohistochemical<sup>7</sup> and immunofluorescent<sup>8</sup> staining of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, immunoprecipitation<sup>1</sup>, Western blotting<sup>1</sup>, *in vitro* activation of leukocytes<sup>2</sup>, induction of endothelial cell permeability<sup>3</sup>, induction of apoptosis in glomerular mesangial cells, and induction of glomerulonephritis *in vivo*<sup>4</sup>.

**Application References:**

1. Jeng CJ, *et al.* 1998. *J. Cell Biol.* 140:685. (IP, WB)
2. Nakashima I, *et al.* 1991. *J. Immunol.* 147:1153.
3. Ishizu A, *et al.* 1995. *Int. Immunol.* 7:1939.
4. Eitner F. 1997. *Kidney. Int.* 51:69.
5. Kawachi H, *et al.* 1992. *Clin. Exp. Immunol.* 88:399. (WB)
6. Dyer KD, *et al.* 2007. *J. Immunol.* 179:1693. (FC) [PubMed](#)
7. Daniel C, *et al.* 2012. *Lab Invest.* 92:812. (IHC)
8. Li B, *et al.* 2006. *Kidney Int.* 69:323. (IF)

**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.

- Antigen** 1. Campbell DG, *et al.* 1981. *Biochem. J.* 195:15.  
**References:** 2. Hosseinzadeh H, *et al.* 1993. *J. Immunol.* 150:1670.