

# Product Data Sheet

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

**Catalog # / Size:** 202521 / 25 µg  
202522 / 100 µg

**Clone:** OX-7

**Isotype:** Mouse IgG1, κ

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

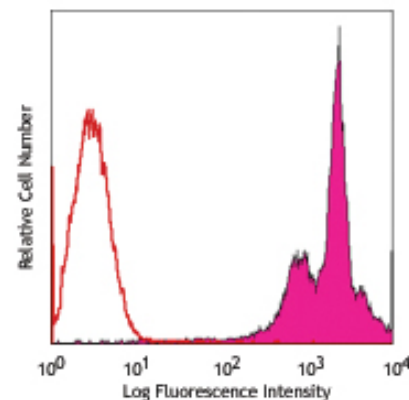
**Reactivity:** Rat, Mouse (AKR/J and PL mouse strains), **Cross-Reactivity:** Rabbit (Lapine), Guinea Pig

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with 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 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 Pacific Blue™

## 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 10<sup>6</sup> cells in 100 µl 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.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

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

### Related Products:

Product	Clone	Application
Pacific Blue™ Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
TruStain fcX™ (anti-mouse CD16/32)	93	FC



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