## **Product Data Sheet**

## PE/Dazzle™ 594 anti-rat CD90/mouse CD90.1 (Thy-1.1)

Catalog # / Size: 1612705 / 25 µg

1612710 / 100 µg

Clone: OX-7

Isotype: Mouse IgG1, κ

Rat thymocyte Thy-1 antigen Immunogen:

Reactivity: Other

**Preparation:** The antibody was purified by affinity

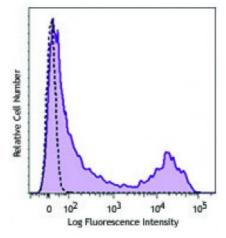
> chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle<sup>™</sup> 594 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



FVB mouse splenocytes were stained with CD90.1 (clone OX-7) PE/Dazzle™ 594 (filled histogram) or mouse IαG1. κ PE/Dazzle™ 594 isotype control (open histogram).

## **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 ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission

of 610 nm.

**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, immunoprecipitation1, Western blotting1, in vitro activation of leukocytes2, induction of endothelial cell permeability3, induction of apoptosis in glomerular mesangial cells, and induction of glomerulonephritis in vivo4.

**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 References:**  1. Campbell DG, et al. 1981. Biochem. J. 195:15.

2. Hosseinzadeh H, et al. 1993. J. Immunol. 150:1670.