

APC/Fire™ 750 anti-rat CD90/mouse CD90.1 (Thy-1.1)

Catalog # / Size: 1612715 / 25 µg
1612720 / 100 µg

Clone: OX-7

Isotype: Mouse IgG1, κ

Immunogen: Rat thymocyte Thy-1 antigen

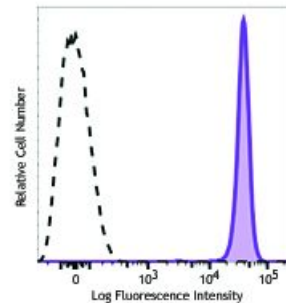
Reactivity: Mouse, Other, Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™

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

Workshop Number: 750 under optimal conditions.

Concentration: 0.2 mg/ml



Lewis rat thymocytes were stained with APC/Fire™ 750 anti-rat CD90/mouse CD90.1 (filled histogram) or APC/Fire™ 750 mouse IgG1, κ 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 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 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: immunohistochemical⁷ and immunofluorescent⁸ 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 vivo*⁴.

- 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-P)
 8. Li B, et al. 2006. *Kidney Int.* 69:323. (ICC)
 9. Uchimura H, et al. 2005. *J Am Soc Nephrol.* 16(4):997-1004. (IHC-F)
 10. Inagi R, et al. 2008. *J Am Soc Nephrol.* 19(5):915-22. (IHC-P)

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.