

Alexa Fluor® 488 anti-rat CD90/mouse CD90.1 (Thy-1.1)

Catalog # / Size: 202505 / 25 µg
202506 / 100 µg

Clone: OX-7

Isotype: Mouse IgG1, κ

Immunogen: Rat thymocyte Thy-1 antigen

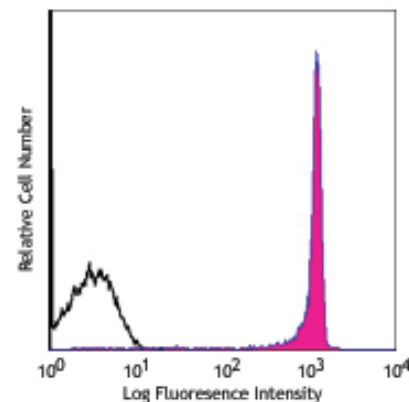
Reactivity: Rat, Mouse (AKR/J and PL mouse strains), **Cross-Reactivity:** Rabbit (Lapine), Guinea Pig

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

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.**



Rat thymocytes stained with OX-7
Alexa Fluor® 488

Applications:

Applications: FC - *Quality tested*
IHC, IF - *Reported in the literature*

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.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

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Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemistry¹ of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, immunoprecipitation², Western blotting², *in vitro* activation of leukocytes³, induction of endothelial cell permeability⁴, induction of glomerulonephritis⁵ *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
- Dong N, *et al.* 2012. *Invest Ophthalmol Vis Sci.* 53:7567. PubMed.
- Kretschmer S, *et al.* 2013. *PLoS One.* 8:e52201. 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	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	Alexa Fluor® 488 Mouse IgG1, κ Isotype Ctrl (FC)	MOPC-21	FC, IF



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