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Product Data Sheet

Alexa Fluor® 700 anti-rat CD90/mouse CD90.1 (Thy-1.1)

Catalog # / Size: 202527 / 25 µg
202528 / 100 µg

Clone: OX-7

Isotype: Mouse IgG1, κ

Immunogen: Rat thymocyte Thy-1 antigen

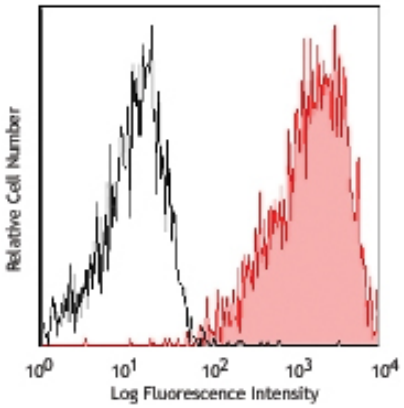
Reactivity: Rat, Mouse (AKR/J and PL mouse strains), **Cross-Reactivity:** Rabbit (Lapine), Guinea Pig

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

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 Alexa Fluor® 700

Applications:

Applications: FC - *Quality tested*

Recommended Usage: This reagent is developed for immunofluorescent staining for flow cytometric analysis; the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.
** Alexa Fluor® 700 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 700 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[1] of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, immunoprecipitation[2], Western blotting[2], *in vitro* activation of leukocytes[3], induction of endothelial cell permeability[4], induction of glomerulonephritis[5] *in vivo*.

Application References:
1. Hermans MHA, *et al.* 1991. *J. Histochem. Cytochem.* 39:1627. (IHC)
2. Jeng CJ, *et al.* 1998. *J. Cell Biol.* 140:685. (IP, WB)
3. Nakashima I, *et al.* 1991. *J. Immunol.* 147:1153.
4. Ishizu A, *et al.* 1995. *Int. Immunol.* 7:1939.
5. Eitner F. 1997. *Kidney. Int.* 51:69.
6. Kawachi H, *et al.* 1992. *Clin. Exp. Immunol.* 88:399.
7. Dyer KD, *et al.* 2007. *J. Immunol.* 179:1693. (FC) PubMed
8. 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
Alexa Fluor® 700 Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC

BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 455-9588 Fax: (858) 455-9587