Product Data Sheet

Brilliant Violet 510™ anti-rat CD90/mouse CD90.1 (Thy-1.1)

Catalog # / Size: 1612675 / 50 μg

Clone: OX-7

Isotype: Mouse IgG1, κ

Immunogen: Rat thymocyte Thy-1 antigen

Reactivity: Other

Preparation: The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and

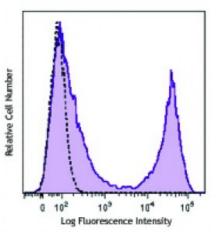
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: 0.2



FVB mouse splenocytes were stained with CD90.1 (clone OX-7) Brilliant Violet 510™ (filled histogram) or mouse IgG1, κ Brilliant Violet 510™ isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended

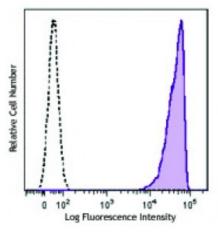
Usage:

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 ≤ 0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to

your instrument manual or manufacturer for support. Brilliant Violet $510^{\,\text{TM}}$ is a trademark of Sirigen Group Ltd.

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Lewis rat thymocytes were stained with CD90.1 (clone OX-7) Brilliant Violet 510^{TM} (filled histogram) or mouse IgG1, κ Brilliant Violet 510^{TM} isotype control (open histogram).

resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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