Product Data Sheet

PerCP anti-mouse CD90.2

Catalog # / $1126610 / 100 \mu g$

Size: $1126605 / 25 \mu g$

Clone: 30-H12

Isotype: Rat IgG2b, κ

Immunogen: Mouse thymus or spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity

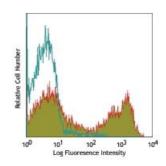
chromatography, and conjugated with PerCP under optimal conditions. The solution is free of unconjugated PerCP

and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 splenocytes stained with

purified 30-H12 PerCP

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 ≤ 0.25 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP has a maximum absorption of 482 nm and a maximum emission of 675 nm.

Application Notes:

Additional reported applications (for the relevant formats) include: *in vivo* and *in vitro* depletion^{1,2,7}, costimulation of CD3/TCR-mediated signal transduction^{3,4}, and immunohistochemical staining5 of acetone-fixed frozen sections. The 30-H12 antibody does not react with Thy-1.1 alloantigen of the AKR/J and PL strains. To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat.

No. 101301/101302) is recommended prior to immunofluorescent staining.

The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 105310).

Application References:

1. Hathcock KS. 1991. Current Protocols in Immunology. 3.4.1. (Deplete)

2. Seaman WE. 1983. J. Immunol. 130:1713. (Deplete)

3. Nakashima I, et al. 1991. J. Immunol. 147:1153. (Costim)

4. Nakashima I, et al. 1993. J. Immunol. 151:3511. (Costim)

5. Ledbetter JA, et al. 1980. J. Exp. Med. 152:280. (IHC)

6. Hardy B, et al. 2005. Int. Immunol. 17:615.

7. Drobyski W, et al. 1996. Blood 87:5355. (Deplete)

8. Dyer KD, et al. 2007. J. Immunol. 179:1693. (FC) PubMed

Description:

CD90.2 is a 25-35 kD immunoglobulin superfamily member also known as Thy1.2. It is expressed on hematopoietic stem cells and neurons, all thymocytes, and peripheral T cells in Thy1.2 bearing mouse strains (Balb/c, CBA/J, C3H/He, C57BL/-, DBA, NZB/-). CD90.2 is a glycosylphosphatidylinositol (GPI)-anchored membrane glycoprotein involved in signal transduction. CD90.2 is involved in costimulation of lymphocyte proliferation and induction of hematopoietic stem cells differentiation. CD90.2 has been shown to interact with CD45. The 30-H12 antibody has been reported to induce Ca²⁺ flux in thymocytes and, in combination with antibody against the CD3/TCR complex, promote thymocyte apoptosis and inhibit CD3-mediated proliferative responses of mature T lymphocytes.

Antigen References:

- 1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.
- 2. Craig W, et al. 1993. J. Exp. Med. 177:1331.
- 3. Reif AE and Schlesinger M. 1989. Cell Surface Antigen Thy-1.
- 4. Mayani H, et a