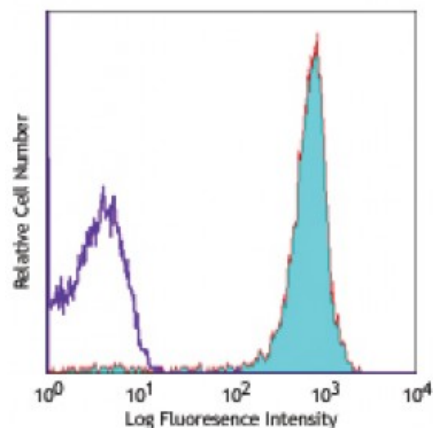


Alexa Fluor® 647 anti-mouse CD90.2

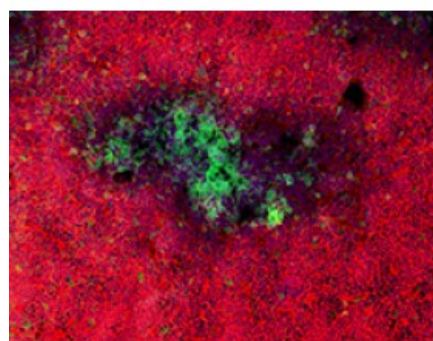
Catalog # / Size:	1126585 / 25 µg 1126590 / 100 µg
Clone:	30-H12
Isotype:	Rat IgG2b, κ
Immunogen:	Mouse thymus or spleen
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



C57BL/6 mouse thymocytes stained with 30-H12 Alexa Fluor® 647.

Applications:

Applications:	Immunofluorescence
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. For immunohistochemical staining on frozen tissue sections, the suggested use is 5-10 microg/mL. It is recommended that the reagent be titrated for optimal performance for other applications.



C57BL/6 mouse frozen thymus section was fixed with 4% paraformaldehyde (PFA) for 10 minutes at room temperature and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 10microg/ml of CD90.2 (clone 30-H12) Alexa Fluor

Application Notes:	<p>* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.</p> <p>Additional reported applications (for the relevant formats) include: <i>in vivo</i> and <i>in vitro</i> 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</p>
---------------------------	---

(Cat. No. 105310).

- Application** 1. Hathcock KS. 1991. Current Protocols in Immunology. 3.4.1. (Deplete)
- References:** 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/6, 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 Ca^{2+} 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** 1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
- References:** 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 al.*