

1P-443-C025

## Monoclonal Antibody to CD90.2 / Thy-1.2 (mouse) Phycoerythrin (PE) conjugated (0.025 mg)

Clone: 1aG4/C5

Isotype: Mouse IgG3

**Specificity:** The mouse monoclonal antibody 1aG4/C5 recognizes alloantigen Thy-1.2 of mouse Thy-1 (CD90); it does not cross-react with Thy-1.1 alloantigen. Thy-1 is an 18-35 kDa cell surface GPI linked glycoprotein (immunoglobulin superfamily); in mouse it is abundant on thymocytes and peripheral T lymphocytes.

Regulatory Status: RUO

Immunogen: thymocytes from C3H/Di mice (Thy-1.2 positive)

Species Reactivity: Mouse

Negative Species: Human, Rat

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

**Concentration:** 0.1 mg/ml

**Storage Buffer:** The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.

**Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.

Expiration: See vial label

Lot Number: See vial label

**Background:** CD90 (Thy-1) is an 18-35 kDa GPI-anchored plasma membrane glycoprotein expressed in many cell types, such as in hematopoietic cells and neurons, connective tissues, various fibroblast and stromal cell lines, tumor endothelial cell lines and other. In the mouse, CD90 is expressed mainly on thymocytes and peripheral T lymphocytes. It is involved in T cell activation, cellular adhesion, proliferation and migration, neurite outgrowth, wound healing, apoptosis, and fibrosis. CD90 participates in multiple signaling cascades and its effects are tissue-and cell type-specific. It often functions as an important regulator of cell-cell and cell-matrix interactions.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

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\*Draber P, Zikan J, Vogtiskova M: Establishment and characterization of permanent murine hybridomas secreting monoclonal anti-thy-1 antibodies. J Immunogenet. 1980 Dec;7(6):455-74.

\*Zikan J, Draber P, Vojtiskova M: Monoclonal IgG3 (kappa) antibodies against murine Thy-1.2 antigen produced by murine hybridomas. Differences in the specificity of the antigen binding site and in the structure of the hinge region. Folia Biol (Praha). 1982;28(6):377-94.

\*Draberova L, Draber P: Thy-1 glycoprotein and src-like protein-tyrosine kinase p53/p56lyn are associated in large detergent-resistant complexes in rat basophilic leukemia cells. Proc Natl Acad Sci U S A. 1993 Apr 15;90(8):3611-5.

\*Bradley JE, Ramirez G, Hagood JS: Roles and regulation of Thy-1, a context-dependent modulator of cell phenotype. Biofactors. 2009 May-Jun;35(3):258-65.

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