



10-443-C025

Monoclonal Antibody to CD90.2 / Thy-1.2 (mouse) Azide Free (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
Application:	Flow Cytometry Recommended dilution: 1 µg/ml Western Blotting Immunocytochemistry Functional Application The bound of antibody 1aG4/C5 to the transfected mast cells induces the activation processes which are similar, but not identical, to the antigen activation of IgE stimulated cells. Other studies approve that the antibody 1aG4/C5 precipitates complexes with Lyn protein tyrosine kinase.
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Azide free phosphate buffered saline (PBS), preserved by filter sterilization, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. 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.

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**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.
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 - *Heneberg P, Lebduska P, Draberova L, Korb J, Draber P: Topography of plasma membrane microdomains and its consequences for mast cell signaling. *Eur J Immunol.* 2006 Oct;36(10):2795-806.

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