

Thy-1 (3H3036): sc-73162

BACKGROUND

Over 100 cell surface markers have been identified through the use of monoclonal antibodies. Many of these markers have proven useful in identifying specific subpopulations of cells within mixed colonies. Accordingly, these molecules have been assigned a "cluster of differentiation" (CD) designation. One such marker, designated Thy-1 (also referred to as CDw90), is a phosphatidyl-anchored cell surface glycoprotein which, when coexpressed with CD34 on cells from normal human bone marrow, identifies a subpopulation that includes putative hematopoietic, pleuripotent stem cells. Thy-1⁺ cells from bone marrow have been implicated in syngeneic graft versus host disease and may serve to regulate autoreactivity after bone marrow transplant.

REFERENCES

- Holter, W., et al. 1991. Phenotypical and functional characterization of leukocytes—the CD-system. *Wien. Klin. Wochenschr.* 103: 247-262.
- Bryson, J.S., et al. 1993. Thy-1⁺ bone marrow cells regulate the induction of murine syngeneic graft-versus-host disease. *Transplantation* 56: 941-945.
- Kim, Y.B., et al. 1994. CD11/CD18 panel report for swine CD workshop. *Vet. Immunol. Immunopathol.* 43: 289-291.
- Firer, M.A., et al. 1995. The Thy-1 molecule: its properties and functions. *Isr. J. Med. Sci.* 31: 382-386.
- Holden, J.T., et al. 1995. Characterization of Thy-1 (CDw90) expression in CD34⁺ acute leukemia. *Blood* 86: 60-65.
- Fujita, N., et al. 1995. Apoptosis inhibition by anti-M_r 23,000 (Thy-1) monoclonal antibodies without inducing Bcl-2 expression. *Cell Growth Differ.* 6: 355-362.
- Campos, L., et al. 1996. Expression of Thy-1 antigen (CDw90) on adult acute leukemia blast cells. *Blood* 87: 413-414.

CHROMOSOMAL LOCATION

Genetic locus: Thy1 (mouse) mapping to 9 A5.1.

SOURCE

Thy-1 (3H3036) is a rat monoclonal antibody raised against EL-4 cells of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

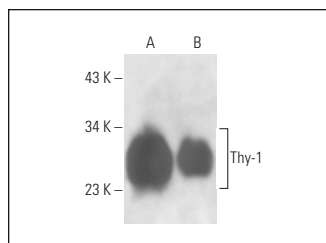
Thy-1 (3H3036) is recommended for detection of Thy-1 on T cell lines (EL 4, 3A9), T lymphocytes, the WEH1-3 cell line and 3T3 fibroblasts of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for Thy-1 siRNA (m): sc-36667, Thy-1 shRNA Plasmid (m): sc-36667-SH and Thy-1 shRNA (m) Lentiviral Particles: sc-36667-V.

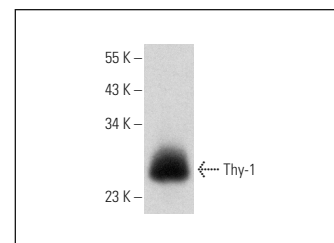
Molecular Weight of Thy-1: 25-37 kDa.

Positive Controls: WEH1-231 whole cell lysate: sc-2213, mouse brain extract: sc-2253 or BW5147 cell lysate: sc-3800.

DATA



Thy-1 (3H3036): sc-73162. Western blot analysis of Thy-1 expression in mouse brain tissue extract (A) and WEH1-231 whole cell lysate (B).



Thy-1 (3H3036): sc-73162. Western blot analysis of Thy-1 expression in BW5147 whole cell lysate.

SELECT PRODUCT CITATIONS

- Xue, X., et al. 2022. Ascorbic acid regulates mouse spermatogonial stem cell proliferation in a Wnt/β-catenin/ROS signaling dependent manner. *Theriogenology* 184: 61-72.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **Thy-1 (aThy-1A1): sc-53456** for Thy-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.