

Thy-1 (H-110): sc-9163

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, pluripotent 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.

CHROMOSOMAL LOCATION

Genetic locus: THY1 (human) mapping to 11q23.3; Thy1 (mouse) mapping to 9 A5.1.

SOURCE

Thy-1 (H-110) is a rabbit polyclonal antibody raised against amino acids 20-130 of Thy-1 of human origin.

PRODUCT

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

APPLICATIONS

Thy-1 (H-110) is recommended for detection of Thy-1 of mouse, rat and human 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Thy-1 siRNA (h): sc-42837, Thy-1 siRNA (m): sc-36667, Thy-1 shRNA Plasmid (h): sc-42837-SH, Thy-1 shRNA Plasmid (m): sc-36667-SH, Thy-1 shRNA (h) Lentiviral Particles: sc-42837-V and Thy-1 shRNA (m) Lentiviral Particles: sc-36667-V.

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

Positive Controls: IMR-32 cell lysate: sc-2409, CCRF-CEM cell lysate: sc-2225 or MOLT-4 cell lysate: sc-2233.

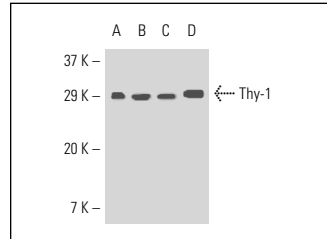
STORAGE

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

RESEARCH USE

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

DATA



Thy-1 (H-110): sc-9163. Western blot analysis of Thy-1 expression in IMR-32 (A), CCRF-CEM (B) and MOLT-4 (C) whole cell lysates and rat brain tissue extract (D).

SELECT PRODUCT CITATIONS

- Spychala, J., et al. 2004. Role of estrogen receptor in the regulation of ecto-5'-nucleotidase and adenosine in breast cancer. *Clin. Cancer Res.* 10: 708-717.
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- de Villiers, J.A., et al. 2011. Influence of low intensity laser irradiation on isolated human adipose derived stem cells over 72 hours and their differentiation potential into smooth muscle cells using retinoic acid. *Stem Cell Rev.* 7: 869-882.
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