

Thy-1 (V-16): sc-31244

BACKGROUND

More than 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. Thy-1 has a molecular weight of 23 kDa as detected by Western blotting.

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 (human) mapping to 11q22.3-q23; Thy1 (mouse) mapping to 9 A5.1.

SOURCE

Thy-1 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-31244 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Thy-1 (V-16) is recommended for detection of Thy-1, mature chain of human and, to a lesser extent, m and r 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).

Thy-1 (V-16) is also recommended for detection of Thy-1, mature chain in additional species, including canine.

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.

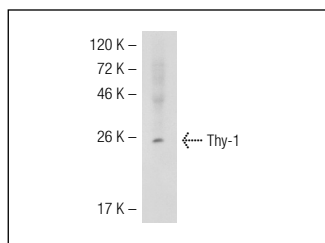
Molecular Weight of Thy-1: 25-37 kDa due to glycosylation.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Thy-1 (V-16): sc-31244. Western blot analysis of Thy-1 expression in mouse PBL whole cell lysate.

RESEARCH USE

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

MONOS
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Try **Thy-1 (OX7): sc-53116** or **Thy-1 (aThy-1A1): sc-53456**, our highly recommended monoclonal alternatives to Thy-1 (V-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Thy-1 (OX7): sc-53116**.