SANTA CRUZ BIOTECHNOLOGY, INC.

Thy-1 (K-16): sc-6071



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.

CHROMOSOMAL LOCATION

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

SOURCE

Thy-1 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-6071 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as fluorescein conjugate for immunofluorescence, sc-6071 FITC, 200 $\mu\text{g}/1$ ml.

APPLICATIONS

Thy-1 (K-16) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (K-16) is also recommended for detection of Thy-1 in additional species, including equine and 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.

Positive Controls: BW5147 cell lysate: sc-3800, CTLL-2 cell lysate: sc-2242 or IMR-32 cell lysate: sc-2409.

STORAGE

Store at 4° C, **D0 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 (K-16): sc-6071. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules

SELECT PRODUCT CITATIONS

- Rouquette-Jazdanian, A.K., et al. 2005. Revaluation of the role of cholesterol in stabilizing rafts implicated in T cell receptor signaling. Cell. Signal. 18: 105-122.
- Asarí Márque, Z., et al. 2010. Localization of taurine transporter and zinc transporters in rat retinal cells and tissue: effect of intracellular zinc chelation. J. Mol. Pathophysiol. 37: 769-778.
- Callahan, L.A., et al. 2013. Primary human chondrocyte extracellular matrix formation and phenotype maintenance using RGD-derivatized PEGDM hydrogels possessing a continuous Young's modulus gradient. Acta Biomater. 9: 6095-6104.
- Mancanares, C.A., et al. 2015. Isolation and characterization of mesenchymal stem cells from the yolk sacs of bovine embryos. Theriogenology 84: 887-898.
- 5. Shi, Z., et al. 2015. Comparison of flowcytometric and immunocytochemistry analysis of stem cell surface markers. J. Biol. Sci. E-published.

PROTOCOLS

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

Try Thy-1 Satisfation Guaranteed

Try Thy-1 (OX7): sc-53116 or Thy-1 (aTHy-1A1): sc-53456, our highly recommended monoclonal

aternatives to Thy-1 (K-16). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Thy-1 (OX7): sc-53116**.