SANTA CRUZ BIOTECHNOLOGY, INC.

THSD7A (I-16): sc-163453

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The Power to Question

BACKGROUND

THSD7A (thrombospondin type-1 domain-containing protein 7A) is a 1,657 amino acid single-pass type I membrane protein that contains 15 TSP type-1 domains. THSD7A is found almost exclusively in endothelial cells from placenta and umbilical cord. While it may be involved in cytoskeletal organization, THSD7A is thought to interact with integrin αV/β3 and paxillin to inhibit endothelial cell migration and tube formation. The gene that encodes THSD7A maps to human chromosome 7p21.3. Chromosome 7 houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: THSD7A (human) mapping to 7p21.3; Thsd7a (mouse) mapping to 6 A1.

SOURCE

THSD7A (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of THSD7A 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-163453 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

THSD7A (I-16) is recommended for detection of THSD7A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with THSD7B.

THSD7A (I-16) is also recommended for detection of THSD7A in additional species, including equine, canine and bovine.

Suitable for use as control antibody for THSD7A siRNA (h): sc-89580, THSD7A siRNA (m): sc-154259, THSD7A shRNA Plasmid (h): sc-89580-SH, THSD7A shRNA Plasmid (m): sc-154259-SH, THSD7A shRNA (h) Lentiviral Particles: sc-89580-V and THSD7A shRNA (m) Lentiviral Particles: sc-154259-V.

Molecular Weight of THSD7A: 185 kDa.

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) 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.

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.

PROTOCOLS

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