SANTA CRUZ BIOTECHNOLOGY, INC.

Thrombospondin 2 (N-20): sc-7655

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Thrombospondin proteins (TSP 1–4) compose a family of glycoproteins that are involved in cell-to-cell and cell-to-matrix signaling. These extracellular, cell-surface proteins form complexes of both homo- and hetero-multimers. Thrombospondins play a role in development, aggregation of platelets, adhesion and migration of cells and progression of cells through the growth cycle. Thrombospondin 1 is released from platelets in response to thrombin stimulation and is a transient component of the extracellular matrix of developing and repairing tissues. Thrombospondin 2 shares a high degree of homology with Thrombospondin 1, and is thought to have overlapping but unique functions. Thrombospondin 3 is a developmentally regulated heparin binding protein. Thrombospondin 4 is neuronally expressed and stimulates neurite outgrowth.

CHROMOSOMAL LOCATION

Genetic locus: THBS2 (human) mapping to 6q27.

SOURCE

Thrombospondin 2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Thrombospondin 2 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-7655 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.

RESEARCH USE

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

APPLICATIONS

Thrombospondin 2 (N-20) is recommended for detection of Thrombospondin 2 of 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), immunohistochemistry (including paraffin-embedded sections) (start-ing 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 Thrombospondin 2 siRNA (h): sc-37031, Thrombospondin 2 shRNA Plasmid (h): sc-37031-SH and Thrombospondin 2 shRNA (h) Lentiviral Particles: sc-37031-V.

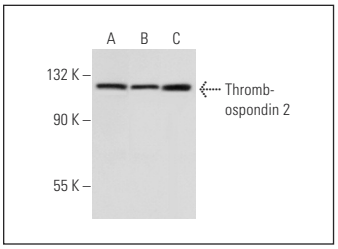
Molecular Weight of Thrombospondin 2: 129 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, A-431 whole cell lysate: sc-2201 or MIA PaCa-2 cell lysate: sc-2285.

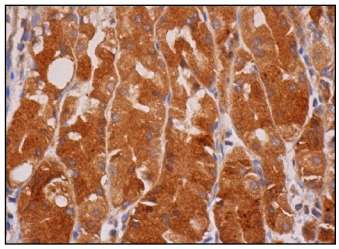
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Thrombospondin 2 (N-20): sc-7655. Western blot analysis of Thrombospondin 2 expression in MCF7 (**A**), A-431 (**B**) and MIA PaCa-2 (**C**) whole cell lysates.



Thrombospondin 2 (N-20): sc-7655. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Cinatl, J., et al. 2000. Cytomegalovirus infection decreases expression of Thrombospondin 1 and 2 in cultured human retinal glial cells: effects of antiviral agents. J. Infect. Dis. 182: 643-651.
2. Armstrong, D.J., et al. 2003. Keratocyte matrix interactions and Thrombospondin 2. Mol. Vis. 9: 74-79.
3. Choudhary, A., et al. 2005. Suppression of Thrombospondin 1 and 2 production by herpes simplex virus 1 infection in cultured keratocytes. Mol. Vis. 11: 163-168.
4. Ashokkumar, M., et al. 2011. An association study of thrombospondin 1 and 2 SNPs with coronary artery disease and myocardial infarction among South Indians. Thromb. Res. 128: e49-e53.

PROTOCOLS

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