

Testican-1 (A-3): sc-398782

BACKGROUND

The Testican family, also designated the BM-40/SPARC/osteonectin family, is composed of highly conserved, extracellular, calcium-binding, sulfate proteoglycans. Expression of Testicans is detected in a variety of tissues, but is most abundant in brain. Family members include Testican-1, Testican-2, Testican-3 and an amino-terminal splice variant of Testican-3, designated N-Tes. Most Testicans inhibit MT-MMPs, thereby inhibiting the activity of pro-MMP-2. Testican-1 is specifically expressed in the thalamus of the brain, and is upregulated in activated astroglial cells of the cerebrum where it mediates neuronal attachment and matrix metalloproteinase activation. After a neural injury, such as a cerebral stroke, Testican-1 expression is upregulated in astrocyte cells in order to inhibit the ability of the protein Neuro-2a to form neurite extensions. Testican-1 is also a component of joint and of the growth plate cartilage that may participate in the regulation of matrix turnover.

CHROMOSOMAL LOCATION

Genetic locus: SPOCK1 (human) mapping to 5q31.2; Spock1 (mouse) mapping to 13 B1.

SOURCE

Testican-1 (A-3) is a mouse monoclonal antibody raised against amino acids 161-238 mapping within an internal region of Testican-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Testican-1 (A-3) is available conjugated to agarose (sc-398782 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398782 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398782 PE), fluorescein (sc-398782 FITC), Alexa Fluor® 488 (sc-398782 AF488), Alexa Fluor® 546 (sc-398782 AF546), Alexa Fluor® 594 (sc-398782 AF594) or Alexa Fluor® 647 (sc-398782 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398782 AF680) or Alexa Fluor® 790 (sc-398782 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Testican-1 (A-3) is recommended for detection of Testican-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 Testican-1 siRNA (h): sc-61669, Testican-1 siRNA (m): sc-61670, Testican-1 shRNA Plasmid (h): sc-61669-SH, Testican-1 shRNA Plasmid (m): sc-61670-SH, Testican-1 shRNA (h) Lentiviral Particles: sc-61669-V and Testican-1 shRNA (m) Lentiviral Particles: sc-61670-V.

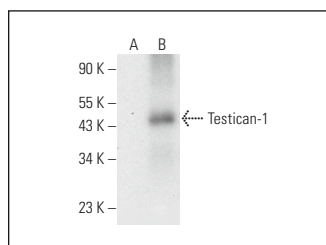
Molecular Weight of Testican-1: 50-56 kDa.

Positive Controls: human Testican-1 transfected 293T whole cell lysate or rat brain extract: sc-2392.

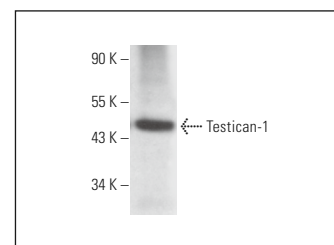
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Testican-1 (A-3): sc-398782. Western blot analysis of Testican-1 expression in non-transfected (A) and human Testican-1 transfected (B) 293T whole cell lysates.



Testican-1 (A-3): sc-398782. Western blot analysis of Testican-1 expression in rat brain tissue extract.

SELECT PRODUCT CITATIONS

- Okato, A., et al. 2017. Dual strands of pre-miR-150 (miR-150-5p and miR-150-3p) act as antitumor miRNAs targeting SPOCK1 in naïve and castration-resistant prostate cancer. *Int. J. Oncol.* 51: 245-256.
- Koshizuka, K., et al. 2018. Antitumor miR-150-5p and miR-150-3p inhibit cancer cell aggressiveness by targeting SPOCK1 in head and neck squamous cell carcinoma. *Auris Nasus Larynx* 45: 854-865.

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 for detailed protocols and support products.

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