

# Testican-1 (H-78): sc-134763

## 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.

## REFERENCES

1. Bocock, J.P., et al. 2003. Human proteoglycan testican-1 inhibits the lysosomal cysteine protease cathepsin L. *Eur. J. Biochem.* 270: 4008-4015.
2. Marr, H.S., et al. 2003. Testican-1 inhibits attachment of Neuro-2a cells. *Matrix Biol.* 22: 259-266.
3. Edgell, C.J., et al. 2004. Testican-1: a differentially expressed proteoglycan with protease inhibiting activities. *Int. Rev. Cytol.* 236: 101-122.
4. Hausser, H.J., et al. 2004. Testican-1, an inhibitor of pro-MMP-2 activation, is expressed in cartilage. *Osteoarthr. Cartil.* 12: 870-877.
5. Meh, P., et al. 2005. Dual concentration-dependent activity of thyroglobulin type-1 domain of testican: specific inhibitor and substrate of cathepsin L. *Biol. Chem.* 386: 75-83.
6. Mohrmann, G., et al. 2005. SPOC1, a novel PHD-finger protein: association with residual disease and survival in ovarian cancer. *Int. J. Cancer* 116: 547-554.

## CHROMOSOMAL LOCATION

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

## SOURCE

Testican-1 (H-78) is a rabbit polyclonal 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 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Testican-1 (H-78) is recommended for detection of Testican-1 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Testican-1 (H-78) is also recommended for detection of Testican-1 in additional species, including equine, canine, bovine and porcine.

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.

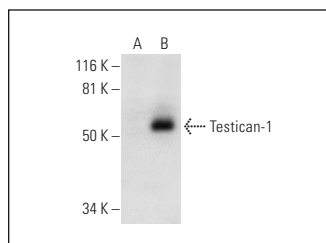
Molecular Weight of Testican-1: 50-56 kDa.

Positive Controls: human Testican-1 transfected 293T whole cell lysate.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Testican-1 (H-78): sc-134763. Western blot analysis of Testican-1 expression in non-transfected (A) and human Testican-1 transfected (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.