

Testican-3 (D-16): sc-49541

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-3 is a 436 amino acid protein that contains a follistatin-like domain, a calcium-binding domain, a COOH-terminal thyroglobulin domain and two glycosaminoglycan attachment sites. Both Testican-3 and N-Tes are expressed in normal brain but downregulated in glioma tissues. Transfection of either the N-Tes or Testican-3 gene into transformed glioma or kidney cells suppresses their invasive growth in collagen gel, suggesting that both N-Tes and Testican-3 interfere with tumor invasion.

REFERENCES

1. Nakada, M., et al. 2001. Suppression of membrane-type 1 matrix metalloproteinase (MMP)-mediated MMP-2 activation and tumor invasion by Testican-3 and its splicing variant gene product, N-Tes. *Cancer Res.* 61: 8896-8902.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607989. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Nakada, M., et al. 2003. Testican-2 abrogates inhibition of membrane-type matrix metalloproteinases by other Testican family proteins. *Cancer Res.* 63: 3364-3369.
4. 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.
5. 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.
6. Röhl, S., et al. 2006. Testican-1 is dispensable for mouse development. *Matrix Biol.* 25: 373-381.

CHROMOSOMAL LOCATION

Genetic locus: SPOCK3 (human) mapping to 4q32.3; Spock3 (mouse) mapping to 8 B3.1.

SOURCE

Testican-3 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Testican-3 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-49541 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Testican-3 (D-16) is recommended for detection of Testican-3 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); not recommended for the detection of Testican-3 isoform 2.

Testican-3 (D-16) is also recommended for detection of Testican-3 in additional species, including canine and porcine.

Suitable for use as control antibody for Testican-3 siRNA (h): sc-61673, Testican-3 siRNA (m): sc-61674, Testican-3 shRNA Plasmid (h): sc-61673-SH, Testican-3 shRNA Plasmid (m): sc-61674-SH, Testican-3 shRNA (h) Lentiviral Particles: sc-61673-V and Testican-3 shRNA (m) Lentiviral Particles: sc-61674-V.

Molecular Weight of Testican-3: 49.1 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.