

# Testican-2 (N-15): sc-49538

## 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-2 is expressed in the central nervous system (CNS), with widespread expression in the olfactory bulb, cerebral cortex, thalamus, hippocampus, cerebellum and medulla, and is also found in lung and testis. Testican-2 is unique in that it actually abolishes the inhibition of MT-MMPs by other testican family members and specifically inactivates N-Tes by binding to its COOH-terminal extracellular calcium-binding domain. Testican-2 halts neurite growth from cerebellar neurons and may be involved in regulating the development of the CNS.

## REFERENCES

- Vannahme, C., et al. 1999. Molecular cloning of Testican-2: defining a novel calcium-binding proteoglycan family expressed in brain. *J. Neurochem.* 73: 12-20.
- Nakada, M., et al. 2003. Testican-2 abrogates inhibition of membrane-type matrix metalloproteinases by other testican family proteins. *Cancer Res.* 63: 3364-3369.
- 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.
- 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.
- Schnepp, A., et al. 2005. Mouse Testican-2. Expression, glycosylation, and effects on neurite outgrowth. *J. Biol. Chem.* 280: 11274-11280.
- Röll, S., et al. 2006. Testican-1 is dispensable for mouse development. *Matrix Biol.* 25: 373-381.

## CHROMOSOMAL LOCATION

Genetic locus: SPOCK2 (human) mapping to 10q22.1; Spock2 (mouse) mapping to 10 B4.

## SOURCE

Testican-2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Testican-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-49538 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Testican-2 (N-15) is recommended for detection of Testican-2 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).

Testican-2 (N-15) is also recommended for detection of Testican-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Testican-2 siRNA (h): sc-61671, Testican-2 siRNA (m): sc-61672, Testican-2 shRNA Plasmid (h): sc-61671-SH, Testican-2 shRNA Plasmid (m): sc-61672-SH, Testican-2 shRNA (h) Lentiviral Particles: sc-61671-V and Testican-2 shRNA (m) Lentiviral Particles: sc-61672-V.

Molecular Weight of Testican-2: 46.8 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Testican-2 (B-5): sc-515691**, our highly recommended monoclonal alternative to Testican-2 (N-15).