



SPANX-A-E (F-15): sc-162262

BACKGROUND

A variety of morphological and molecular changes are required for mature spermatozoa formation. These steps are temporally guided by the transcription and translation of several testis-specific genes. SPANX (sperm protein associated with the nucleus, X-linked) family members are sperm and testis specific proteins containing between 97-103 amino acids, whose genes form a cluster on chromosome X. Sharing a high level of sequence similarity, SPANX-A, -B, -C, -D and -E localize to both cytoplasm and nucleus where they are associated with nuclear craters. While SPANX-A through -E are detected in round and elongated spermatids, SPANX-C and D are also found in melanoma and SPANX-C has been reported in bladder carcinoma.

REFERENCES

- Westbrook, V.A., et al. 2000. Spermatid-specific expression of the novel X-linked gene product SPANX localized to the nucleus of human spermatozoa. *Biol. Reprod.* 63: 469-481.
- Westbrook, V.A., et al. 2001. Differential nuclear localization of the cancer/testis-associated protein, SPANX/CTp11, in transfected cells and in 50% of human spermatozoa. *Biol. Reprod.* 64: 345-358.
- Zendman, A.J., et al. 2003. The human SPANX multigene family: genomic organization, alignment and expression in male germ cells and tumor cell lines. *Gene* 309: 125-133.
- Westbrook, V.A., et al. 2004. Genomic organization, incidence, and localization of the SPANX family of cancer-testis antigens in melanoma tumors and cell lines. *Clin. Cancer Res.* 10: 101-112.
- Kouprina, N., et al. 2005. Dynamic structure of the SPANX gene cluster mapped to the prostate cancer susceptibility locus HPCX at Xq27. *Genome Res.* 15: 1477-1486.
- Salemi, M., et al. 2006. Expression of SPANX proteins in normal testes and in testicular germ cell tumours. *Int. J. Androl.* 29: 368-373.
- Westbrook, V.A., et al. 2006. Hominoid-specific SPANXA/D genes demonstrate differential expression in individuals and protein localization to a distinct nuclear envelope domain during spermatid morphogenesis. *Mol. Hum. Reprod.* 12: 703-716.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 300305. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

SOURCE

SPANX-A-E (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPANX-A 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-162262 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPANX-A-E (F-15) is recommended for detection of SPANX-A, SPANX-B, SPANX-C, SPANX-D and SPANX-E of 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).

Molecular Weight of SPANX-A-E: 12 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.