

SPIN4 (E-19): sc-248680

BACKGROUND

SPIN4 (spindlin family, member 4), also known as spindlin-4, is a 249 amino acid cytoplasmic protein belonging to the SPIN/STSY family that is involved in the generation of gametes. Most visceral glandular cells, seminal vesicle, a fraction of cells in seminiferous ducts, Purkinje cells and heart muscle display moderate expression of SPIN4. The gene that encodes SPIN4 contains 4,117 bases and maps to human chromosome Xq11.1. The human X chromosome is commonly known as the sex chromosome shared by males and females. LINE1 repeat elements cover one-third of the X chromosome, with a distribution that is consistent with their proposed role as way stations in the process of X-chromosome inactivation. The X chromosome contains 1,098 genes, of which 99 encode proteins expressed in testis and in various tumour types. There is a high number of mendelian diseases that are documented for the X chromosome.

REFERENCES

- Oh, B., et al. 1997. Spindlin, a major maternal transcript expressed in the mouse during the transition from oocyte to embryo. *Development* 124: 493-503.
- Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
- Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
- Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. *Nat. Genet.* 36: 40-45.
- Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.

CHROMOSOMAL LOCATION

Genetic locus: SPIN4 (human) mapping to Xq11.1; Spin4 (mouse) mapping to X C3.

SOURCE

SPIN4 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPIN4 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-248680 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SPIN4 (E-19) is recommended for detection of SPIN4 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); non cross-reactive with SPIN1, SPIN2 or SPIN3.

SPIN4 (E-19) is also recommended for detection of SPIN4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SPIN4 siRNA (h): sc-90949, SPIN4 siRNA (m): sc-153761, SPIN4 shRNA Plasmid (h): sc-90949-SH, SPIN4 shRNA Plasmid (m): sc-153761-SH, SPIN4 shRNA (h) Lentiviral Particles: sc-90949-V and SPIN4 shRNA (m) Lentiviral Particles: sc-153761-V.

Molecular Weight of SPIN4: 29 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.

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.