



Tektin 4 (Y-16): sc-169557

BACKGROUND

The Tektin proteins comprise a family of insoluble, α -helical, filament-forming peptides that interact with Tubulins and, via this interaction, form flagellar and ciliary microtubules. Tektin 4, also known as TEKT4, is a 435 amino acid protein belonging to the tektin family. Localizing to cytoplasm as well as haploid round spermatids in testis, Tektin 4 is expressed in the abaxial surface of outer dense fibers (ORFs) in sperm flagella. Deletion of Tektin 4 is associated with uncoordinated waveform propagation and reduced velocity of sperm flagellum, resulting in subfertility. Tektin 4 may also function as a structural component by forming filamentous polymers of ciliary and flagellar microtubules. The gene encoding Tektin 4 maps to human chromosome 2q11.1. The second largest human chromosome, chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TEKT4 (human) mapping to 2q11.1; Tekt4 (mouse) mapping to 17 A3.3.

SOURCE

Tektin 4 (Y-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Tektin 4 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169557 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tektin 4 (Y-16) is recommended for detection of Tektin 4 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 other Tektin family members.

Tektin 4 (Y-16) is also recommended for detection of Tektin 4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Tektin 4 siRNA (h): sc-94396, Tektin 4 siRNA (m): sc-154184, Tektin 4 shRNA Plasmid (h): sc-94396-SH, Tektin 4 shRNA Plasmid (m): sc-154184-SH, Tektin 4 shRNA (h) Lentiviral Particles: sc-94396-V and Tektin 4 shRNA (m) Lentiviral Particles: sc-154184-V.

Molecular Weight of Tektin 4: 51 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.