SANTA CRUZ BIOTECHNOLOGY, INC.

SPATA9 (E-14): sc-160827

BACKGROUND

SPATA9 (spermatogenesis associated 9), also known as NYD-SP16, is a 254 amino acid single-pass membrane protein that is highly expressed in testis and pancreas with low expression in heart, lung, and brain. A component of the sperm acrosome, SPATA9 may participate in sperm capacitation and acrosome reaction, and is therefore necessary for fertilization. SPATA9 is also suggested to be involved in testicular development/spermatogenesis and may be an important factor in male infertility. No expression of SPATA9 was found in patients affected by Sertoli-cell-only syndrome, also known as Del Castillo syndrome or germ cell aplasia, which is characterized by male sterility without sexual abnormality. SPATA9 is encoded by a gene located on human chromosome 5, which consists of about 181 million base pairs, encodes around 1,000 genes and represents about 6% of human genomic DNA.

REFERENCES

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3. Baldi, E., Luconi, M., Bonaccorsi, L., Krausz, C. and Forti, G. 1996. Human sperm activation during capacitation and acrosome reaction: role of calcium, protein phosphorylation and lipid remodelling pathways. Front. Biosci. 1: d189-d205.
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6. Lu, Y., Huo, R., Yuan, Y., Li, J., Shi, Q. and Sha, J. 2006. Human testicular protein NYD-SP16 is involved in sperm capacitation and the acrosome reaction. Fertil. Steril. 86: 1228-1234.

CHROMOSOMAL LOCATION

Genetic locus: SPATA9 (human) mapping to 5q15; Spata9 (mouse) mapping to 13 C1.

SOURCE

SPATA9 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPATA9 of human origin.

STORAGE

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

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-160827 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPATA9 (E-14) is recommended for detection of SPATA9 of mouse 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 SPATA family members.

Suitable for use as control antibody for SPATA9 siRNA (h): sc-91922, SPATA9 siRNA (m): sc-153726, SPATA9 shRNA Plasmid (h): sc-91922-SH, SPATA9 shRNA Plasmid (m): sc-153726-SH, SPATA9 shRNA (h) Lentiviral Particles: sc-91922-V and SPATA9 shRNA (m) Lentiviral Particles: sc-153726-V.

Molecular Weight of SPATA9: 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.