SANTA CRUZ BIOTECHNOLOGY, INC.

SPATA22 (Q-20): sc-240918

BACKGROUND

SPATA22 (spermatogenesis-associated protein 22), also known as testis development protein NYD-SP20, is a 363 amino acid protein that exists as 2 alternatively spliced isoforms and is highly expressed in adult testis. The gene that encodes SPATA22 consists of approximately 73,842 bases and maps to human chromosome 17p13.2. Encoding more than 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Spata22 (mouse) mapping to 11 B4.

SOURCE

SPATA22 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SPATA22 of mouse 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-240918 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPATA22 (Q-20) is recommended for detection of SPATA22 of mouse and rat 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.

SPATA22 (Q-20) is also recommended for detection of SPATA22 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SPATA22 siRNA (m): sc-153720, SPATA22 shRNA Plasmid (m): sc-153720-SH and SPATA22 shRNA (m) Lentiviral Particles: sc-153720-V.

Molecular Weight of SPATA isoforms: 41/37 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.