

SPATA5 (N-12): sc-138640

BACKGROUND

SPATA5 (spermatogenesis-associated protein 5), also known as SPAF (spermatogenesis-associated factor protein) or AFG2 (ATPase family protein 2 homolog), is an 893 amino acid protein that localizes to cytoplasm and mitochondrion, and may be involved in morphological and functional mitochondrial transformations during spermatogenesis. Existing as three alternatively spliced isoforms, SPATA5 belongs to the AAA ATPase family and the AFG2 subfamily. The gene that encodes SPATA5 consists of more than 396,000 bases and maps to human chromosome 4q28.1. Housing nearly 900 genes, chromosome 4 represents approximately 6% of the human genome and is associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SPATA5 (human) mapping to 4q28.1; Spata5 (mouse) mapping to 3 B.

SOURCE

SPATA5 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SPATA5 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138640 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPATA5 (N-12) is recommended for detection of SPATA5 isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) 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 SPATA5 siRNA (h): sc-89261, SPATA5 siRNA (m): sc-153722, SPATA5 shRNA Plasmid (h): sc-89261-SH, SPATA5 shRNA Plasmid (m): sc-153722-SH, SPATA5 shRNA (h) Lentiviral Particles: sc-89261-V and SPATA5 shRNA (m) Lentiviral Particles: sc-153722-V.

Molecular Weight of SPATA5 isoforms: 98/86/76 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.