

# SPACA1 (S-16): sc-244192

## BACKGROUND

SPACA1 (sperm acrosome associated 1), also known as SAMP32 (sperm acrosome membrane-associated protein 1), is a 294 amino acid single-pass type I membrane protein that localizes to the acrosomal membrane of spermatids and mature spermatozoa where it is thought to participate in acrosomal morphogenesis and in sperm-egg binding and fusion, respectively. Expressed exclusively in testis, SPACA1 is encoded by a gene located on human chromosome 6q15. Chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are located on chromosome 6.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SPACA1 (human) mapping to 6q15; Spaca1 (mouse) mapping to 4 A5.

## STORAGE

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

## SOURCE

SPACA1 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of SPACA1 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-244192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SPACA1 (S-16) is recommended for detection of SPACA1 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 SPACA3, SPACA4 or SPACA5.

Suitable for use as control antibody for SPACA1 siRNA (h): sc-95205, SPACA1 siRNA (m): sc-153695, SPACA1 shRNA Plasmid (h): sc-95205-SH, SPACA1 shRNA Plasmid (m): sc-153695-SH, SPACA1 shRNA (h) Lentiviral Particles: sc-95205-V and SPACA1 shRNA (m) Lentiviral Particles: sc-153695-V.

Molecular Weight of SPACA1: 32 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## RESEARCH USE

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