

## SACA1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10775A

## Specification

# SACA1 Antibody (N-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	<u>Q9HBV2</u>
Other Accession	<u>NP_112222.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	32143
Antigen Region	46-74

## SACA1 Antibody (N-term) - Additional Information

#### Gene ID 81833

## **Other Names**

Sperm acrosome membrane-associated protein 1, Sperm acrosomal membrane-associated protein 32, SPACA1, SAMP32

#### **Target/Specificity**

This SACA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-74 amino acids from the N-terminal region of human SACA1.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

SACA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# SACA1 Antibody (N-term) - Protein Information

Name SPACA1



# Synonyms SAMP32

**Function** Plays a role in acrosome expansion and establishment of normal sperm morphology during spermatogenesis (By similarity). Important for male fertility (PubMed:<u>11870081</u>).

### **Cellular Location**

Cytoplasmic vesicle, secretory vesicle, acrosome inner membrane; Single-pass type I membrane protein. Note=Primarily found in the equatorial segment of the acrosome (PubMed:11870081). The tyrosine phosphorylated protein localizes to a smaller region within the equatorial segment (By similarity). Also expressed weakly in the principal segment (PubMed:11870081). {ECO:0000250|UniProtKB:D5K8A9, ECO:0000269|PubMed:11870081}

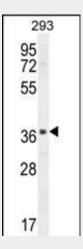
Tissue Location Testis specific..

## SACA1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

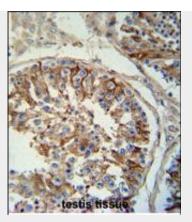
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### SACA1 Antibody (N-term) - Images

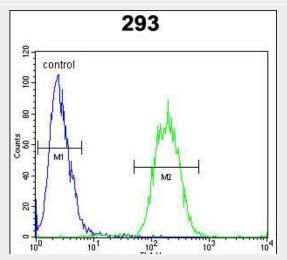


SACA1 Antibody (N-term) (Cat. #AP10775a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SACA1 antibody detected the SACA1 protein (arrow).





SACA1 antibody (N-term) (Cat. #AP10775a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SACA1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SACA1 Antibody (N-term) (Cat. #AP10775a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### SACA1 Antibody (N-term) - Background

The correlation of anti-sperm antibodies with cases of unexplained infertility implicates a role for these antibodies in blocking fertilization. Improved diagnosis and treatment of immunologic infertility, as well as identification of proteins for targeted contraception, are dependent on the identification and characterization of relevant sperm antigens. The protein expressed by this gene is recognized by anti-sperm antibodies from infertile males. Furthermore, antibodies generated against the recombinant protein block in vitro fertilization. This protein localizes to the acrosomal membrane of spermatids and mature spermatozoa where it is thought to play a role in acrosomal morphogenesis and in sperm-egg binding and fusion, respectively.

# SACA1 Antibody (N-term) - References

Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) : Levy, D., et al. BMC Med. Genet. 8 SUPPL 1, S3 (2007) :



Vasan, R.S., et al. BMC Med. Genet. 8 SUPPL 1, S2 (2007) : Mungall, A.J., et al. Nature 425(6960):805-811(2003) Hao, Z., et al. Biol. Reprod. 66(3):735-744(2002)