

SPAG1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5699a

Specification

SPAG1 Antibody (N-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	<u>Q07617</u>
Other Accession	<u>NP_003105.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	103639
Antigen Region	124-152

SPAG1 Antibody (N-term) - Additional Information

Gene ID 6674

Other Names Sperm-associated antigen 1, HSD-38, Infertility-related sperm protein Spag-1, SPAG1

Target/Specificity

This SPAG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 124-152 amino acids from the N-terminal region of human SPAG1.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

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

SPAG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPAG1 Antibody (N-term) - Protein Information

Name SPAG1



Function May play a role in the cytoplasmic assembly of the ciliary dynein arms (By similarity). May play a role in fertilization. Binds GTP and has GTPase activity.

Cellular Location

Cytoplasm. Dynein axonemal particle Note=Colocalizes with tubulin

Tissue Location

Present in most tissues, including lung, with the strongest expression in brain, colon, kidney, and testis. In sperm and testis, detected in particular in pachytene primary spermatocytes. Up-regulated in pancreatic tumor tissues and not in normal pancreatic tissue.

SPAG1 Antibody (N-term) - Protocols

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

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

SPAG1 Antibody (N-term) - Images



SPAG1 Antibody (N-term) (Cat. #AP5699a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the SPAG1 antibody detected the SPAG1 protein (arrow).





SPAG1 Antibody (N-term) (Cat. #AP5699a) 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 SPAG1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

SPAG1 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 agglutinating antibodies from an infertile woman. Furthermore, immunization of female rats with the recombinant human protein reduced fertility. This protein localizes to the plasma membrane of germ cells in the testis and to the post-acrosomal plasma membrane of mature spermatozoa. Recombinant polypeptide binds GTP and exhibits GTPase activity. Thus, this protein may regulate GTP signal transduction pathways involved in spermatogenesis and fertilization. Two transcript variants of this gene encode the same protein. [provided by RefSeq].

SPAG1 Antibody (N-term) - References

Lin, W., et al. Mol. Hum. Reprod. 7(9):811-818(2001) Diekman, A.B., et al. Am. J. Reprod. Immunol. 37(1):111-117(1997) Zhang, M.L., et al. Chin. Med. J. 105(12):998-1003(1992)