

SPAG8 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12827b

Specification

SPAG8 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O99932
Other Accession	NP_758516.1 , NP_001034681.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51139
Antigen Region	383-411

SPAG8 Antibody (C-term) - Additional Information

Gene ID 26206

Other Names

Sperm-associated antigen 8, HSD-1, Sperm membrane protein 1, SMP-1, Sperm membrane protein BS-84, SPAG8

Target/Specificity

This SPAG8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 383-411 amino acids from the C-terminal region of human SPAG8.

Dilution

WB~~1:1000

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

SPAG8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPAG8 Antibody (C-term) - Protein Information

Name SPAG8 ([HGNC:14105](#))

Function Microtubule inner protein (MIP) part of the dynein-decorated doublet microtubules

(DMTs) in cilia axoneme, which is required for motile cilia beating (PubMed:[36191189](#)). Plays a role in spermatogenesis by enhancing the binding of CREM isoform tau to its coactivator FHL5 and increasing the FHL5-regulated transcriptional activation of CREM isoform tau (By similarity). Involved in the acrosome reaction and in binding of sperm to the zona pellucida (By similarity). Plays a role in regulation of the cell cycle by controlling progression through the G2/M phase, possibly by delaying the activation of CDK1 which is required for entry into mitosis (PubMed:[19548270](#)). May play a role in fertility and microtubule formation through interaction with RANBP9 (PubMed:[10500252](#)).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q3V0Q6}. Nucleus {ECO:0000250|UniProtKB:Q3V0Q6}. Cytoplasmic vesicle, secretory vesicle, acrosome. Cytoplasm, cytoskeleton, microtubule organizing center. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, cilium axoneme. Note=In mature sperm cells, detected in the acrosomal region of the head and in the middle piece of the tail (By similarity). Localized to the nucleus and cytoplasm of spermatocytes and round spermatids while, in elongating spermatids, expressed in the cytoplasm but not in the nucleus (By similarity). During the cell cycle, localized on the microtubule-organizing center (MTOC) during prophase. In metaphase, extends along spindle microtubules. In anaphase, detected on the astral microtubules and mid-zone. In telophase, remains at the mid-zone. After cytokinesis, returns to the MTOC (PubMed:19548270). Microtubule inner protein (MIP) part of the dynein-decorated doublet microtubules (DMTs) in cilia axoneme (By similarity). {ECO:0000250|UniProtKB:E1BNS6, ECO:0000250|UniProtKB:Q3V0Q6, ECO:0000269|PubMed:19548270}

Tissue Location

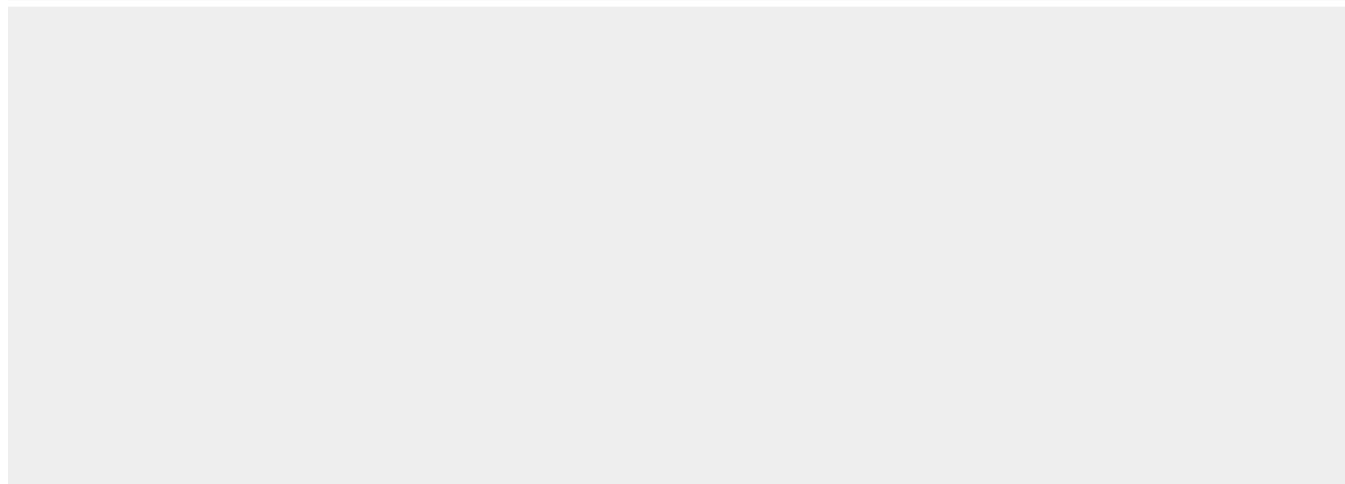
Expressed in testis (germ cells), but not in liver, kidney, prostate and small intestine. Expressed in airway epithelial cells (PubMed:36191189).

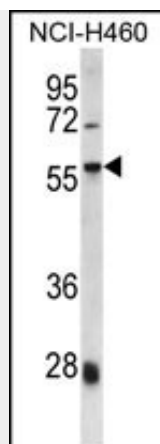
SPAG8 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SPAG8 Antibody (C-term) - Images





SPAG8 Antibody (C-term) (Cat. #AP12827b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the SPAG8 antibody detected the SPAG8 protein (arrow).

SPAG8 Antibody (C-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 encoded by this gene is recognized by sperm agglutinating antibodies from an infertile woman. This protein is localized in germ cells of the testis at all stages of spermatogenesis and is localized to the acrosomal region of mature spermatozoa. Alternatively spliced variants that encode different protein isoforms have been described but the full-length sequences of only two have been determined.

SPAG8 Antibody (C-term) - References

- Wu, H., et al. FEBS Lett. 584(13):2807-2815(2010)
- Li, R., et al. Cell Biochem. Funct. 27(5):264-268(2009)
- Cheng, G.Y., et al. Asian J. Androl. 9(1):23-29(2007)
- Tang, X., et al. J. Mol. Med. 82(6):383-388(2004)
- Humphray, S.J., et al. Nature 429(6990):369-374(2004)