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# SPAG8 Antibody (C-term) Blocking peptide

**Synthetic peptide**
**Catalog # BP12827b**

## Specification

### SPAG8 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q99932

### SPAG8 Antibody (C-term) Blocking peptide - 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

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SPAG8 Antibody (C-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/36191189" target="_blank">36191189</a>). 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:<a href="http://www.uniprot.org/citations/19548270" target="_blank">19548270</a>). May play a role in fertility and microtubule formation through interaction with RANBP9 (PubMed:<a href="http://www.uniprot.org/citations/10500252" target="_blank">10500252</a>).

**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) Blocking peptide - Protocols

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

- Blocking Peptides

## SPAG8 Antibody (C-term) Blocking peptide - Images

## SPAG8 Antibody (C-term) Blocking peptide - Background

The correlation of anti-sperm antibodies with cases ofunexplained infertility implicates a role for these antibodies inblocking fertilization. Improved diagnosis and treatment ofimmunologic infertility, as well as identification of proteins fortargeted contraception, are dependent on the identification andcharacterization of relevant sperm antigens. The protein encoded bythis gene is recognized by sperm agglutinating antibodies from aninfertile woman. This protein is localized in germ cells of thetestis at all stages of spermatogenesis and is localized to theacrosomal region of mature spermatozoa. Alternatively splicedvariants that encode different protein isoforms have been describedbut the full-length sequences of only two have been determined.

## SPAG8 Antibody (C-term) Blocking peptide - 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)