

SPAG8 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58786

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q99932
Reactivity	Rat, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51139

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
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250 UniProtKB:Q3V0Q6}. 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.