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SMCP Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57760

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P49901
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	12767
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SMCP
Epitope Specificity	31-116/116
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Mitochondrion membrane. Becomes associated with the spermatid mitochondrion capsule at step 16 of spermatogenesis.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SMCP is a 116 amino acid cytoplasmic protein that is found in the outer capsule that is associated with sperm mitochondria. Expressed specifically in spermatids of seminiferous tubules, SMCP is thought to be involved in the organization and stabilization of the helical sheath structure and may play a role in overall sperm motility. SMCP has a short N-terminal segment, a C-terminal lysine and several internal cysteines. Defects in the gene encoding SMCP may be a cause of male infertility due to both reduced sperm motility and an inability to pierce the zona pellucida of the female egg.

Additional Information

Gene ID	4184
Other Names	Sperm mitochondrial-associated cysteine-rich protein, SMCP, MCS, MCSP
Target/Specificity	Testis. Is selectively expressed in the spermatids of seminiferous tubules.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	SMCP
Synonyms	MCS, MCSP
Function	Involved in sperm motility. Its absence is associated with genetic background dependent male infertility. Infertility may be due to reduced sperm motility in the female reproductive tract and inability to penetrate the oocyte zona pellucida (By similarity).
Cellular Location	Cytoplasm. Mitochondrion membrane; Peripheral membrane protein; Cytoplasmic side. Note=Becomes associated with the spermatid mitochondrion capsule at step 16 of spermatogenesis.
Tissue Location	Testis. Is selectively expressed in the spermatids of seminiferous tubules.