

**SMCP Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12825b****Specification**

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**SMCP Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P49901</a>
Other Accession	<a href="#">NP_109588.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	12767
Antigen Region	68-97

**SMCP Antibody (C-term) - Additional Information****Gene ID** 4184**Other Names**

Sperm mitochondrial-associated cysteine-rich protein, SMCP, MCS, MCSP

**Target/Specificity**

This SMCP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-97 amino acids from the C-terminal region of human SMCP.

**Dilution**

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**

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

**SMCP Antibody (C-term) - 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**

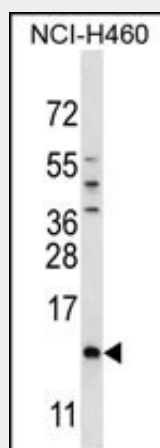
Testis. Is selectively expressed in the spermatids of seminiferous tubules.

**SMCP 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](#)

**SMCP Antibody (C-term) - Images**



SMCP Antibody (C-term) (Cat. #AP12825b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the SMCP antibody detected the SMCP protein (arrow).

**SMCP Antibody (C-term) - Background**

Sperm mitochondria differ in morphology and subcellular localization from those of somatic cells. They are elongated, flattened, and arranged circumferentially to form a helical coiled sheath in the midpiece of the sperm flagellum. The protein encoded by this gene localizes to the capsule associated with the mitochondrial outer membranes and is thought to function in the organization and stabilization of the helical structure of the sperm's mitochondrial sheath.

**SMCP Antibody (C-term) - References**

Yatsenko, A.N., et al. Hum. Mol. Genet. 15(23):3411-3419(2006)  
Hawthorne, S.K., et al. Genomics 87(3):382-391(2006)  
Behne, D., et al. Annu. Rev. Nutr. 21, 453-473 (2001) :  
Cataldo, L., et al. Mol. Reprod. Dev. 45(3):320-331(1996)  
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