



## Rabbit Anti-SMCP antibody

SL20082R

<b>Product Name:</b>	SMCP
<b>Chinese Name:</b>	精子Mitochondrion相关富含半胱氨酸蛋白抗体
<b>Alias:</b>	HSMCSGEN1; MCS; MCSP; MCSP_HUMAN; Mitochondrial capsule selenoprotein; SMCP; Sperm mitochondria associated cysteine rich protein; Sperm mitochondrial-associated cysteine-rich protein.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	13kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SMCP:31-116/116
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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.

**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.

**Subcellular Location:**

Cytoplasm. Mitochondrion membrane. Becomes associated with the spermatid mitochondrion capsule at step 16 of spermatogenesis.

**Tissue Specificity:**

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

**SWISS:**

P49901

**Gene ID:**

4184

**Database links:**

[Entrez Gene: 4184](#) Human

[Omim: 601148](#) Human

[SwissProt: P49901](#) Human

[Unigene: 111850](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.