



## Rabbit Anti-SCAP antibody

SL3862R

<b>Product Name:</b>	SCAP
<b>Chinese Name:</b>	固醇调节元件Binding protein裂解激活蛋白抗体
<b>Alias:</b>	KIAA0199; SCAP; SCAP_HUMAN; SREBF chaperone; SREBF chaperone protein; SREBP cleavage activating protein; SREBP cleavage-activating protein; Sterol regulatory element binding protein cleavage-activating protein; Sterol regulatory element-binding protein cleavage-activating protein.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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>	140kDa
<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 SCAP:251-350/1279
<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>	SCAP is an escort protein required for cholestrol and lipid homeostasis. Cholesterol homeostasis in animal cells is achieved by regulated cleavage of SREBPs, membrane-bound transcription factors. SCAP forms a complex with SREBPs in order to release the active domains of SREBPs.

**Function:**

Escort protein required for cholesterol as well as lipid homeostasis. Regulates export of the SCAP/SREBF complex from the ER upon low cholesterol. Formation of a ternary complex with INSIG at high sterol concentrations leads to masking of an ER-export signal in SCAP and retention of the complex in the ER. Low sterol concentrations trigger release of INSIG, a conformational change in the SSC domain of SCAP, unmasking of the ER export signal, recruitment into COPII-coated vesicles, transport to the Golgi complex, proteolytic cleavage of SREBF in the Golgi, release of the transcription factor fragment of SREBF from the membrane, its import into the nucleus and up-regulation of LDLR, INSIG1 and the mevalonate pathway (By similarity).

**Subunit:**

Membrane region forms a homotetramer. Forms a stable complex with SREBF1/SREBP1 or SREBF2/SREBP2 through its C-terminal cytoplasmic domain. Forms a ternary complex with INSIG1 or INSIG2 through its transmembrane domains at high sterol concentrations. Interacts with the SEC23/SEC24 complex in a SAR1-GTP-dependent manner through an ER export signal in its third cytoplasmic loop. Binds cholesterol through its SSC domain (By similarity). Component of SCAP/SREBP complex composed of SREBF2, SCAP and RNF139; the complex hampers the interaction between SCAP and SEC24B, thereby reducing SREBF2 proteolytic processing. Interacts with RNF139; the interaction inhibits the interaction of SCAP with SEC24B and hampering the ER to Golgi transport of the SCAP/SREBP complex.

**Subcellular Location:**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Multi-pass membrane protein.

**Similarity:**

Belongs to the WD repeat SCAP family.  
Contains 1 SSD (sterol-sensing) domain.  
Contains 7 WD repeats.

**SWISS:**

Q12770

**Gene ID:**

22937

**Database links:**

UniProtKB/Swiss-Prot: Q12770.4

**Important Note:**

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

