

### SCAP Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP12299a

### **Specification**

## SCAP Antibody (N-term) Blocking peptide - Product Information

**Primary Accession** 

<u>012770</u>

# SCAP Antibody (N-term) Blocking peptide - Additional Information

**Gene ID 22937** 

#### **Other Names**

Sterol regulatory element-binding protein cleavage-activating protein, SCAP, SREBP cleavage-activating protein, SCAP, KIAA0199

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SCAP Antibody (N-term) Blocking peptide - Protein Information

Name SCAP {ECO:0000303|PubMed:10570913, ECO:0000312|HGNC:HGNC:30634}

#### **Function**

Escort protein required for cholesterol as well as lipid homeostasis (By similarity). Regulates export of the SCAP-SREBP complex from the endoplasmic reticulum to the Golgi upon low cholesterol, thereby regulating the processing of sterol regulatory element-binding proteins (SREBPs) SREBF1/SREBP1 and SREBF2/SREBP2 (By similarity). At high sterol concentrations, formation of a ternary complex with INSIG (INSIG1 or INSIG2) leads to mask the ER export signal in SCAP, promoting retention of the complex in the endoplasmic reticulum (By similarity). Low sterol concentrations trigger release of INSIG, a conformational change in the SSD domain of SCAP, unmasking of the ER export signal, promoting recruitment into COPII-coated vesicles and transport of the SCAP-SREBP to the Golgi: in the Golgi, SREBPs are then processed, releasing the transcription factor fragment of SREBPs from the membrane, its import into the nucleus and up-regulation of LDLR, INSIG1 and the mevalonate pathway (By similarity). Binds cholesterol via its SSD domain (By similarity).

### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle, COPII- coated vesicle membrane {ECO:0000250|UniProtKB:P97260}; Multi-pass membrane protein. Note=Moves from the



endoplasmic reticulum to the Golgi in the absence of sterols (By similarity) Requires the presence of SPRING1 for proper localization to endoplasmic reticulum (PubMed:32111832). {ECO:0000250|UniProtKB:P97260, ECO:0000269|PubMed:32111832}

### SCAP Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

## • Blocking Peptides

SCAP Antibody (N-term) Blocking peptide - Images

# SCAP Antibody (N-term) Blocking peptide - Background

This gene encodes a protein with a sterol sensing domain(SSD) and seven WD domains. In the presence of cholesterol, thisprotein binds to sterol regulatory element binding proteins(SREBPs) and mediates their transport from the ER to the Golgi. TheSREBPs are then proteolytically cleaved and regulate sterolbiosynthesis.

## SCAP Antibody (N-term) Blocking peptide - References

Vasseur, F., et al. J. Hum. Genet. 55(4):227-231(2010)Liu, X., et al. Atherosclerosis 208(2):421-426(2010)McGeachie, M., et al. Circulation 120(24):2448-2454(2009)Chen, S.N., et al. BMC Med. Genet. 10, 111 (2009):Voora, D., et al. Circ Cardiovasc Genet 1(2):100-106(2008)