

## Product datasheet for MR218374L4V

## OriGene Technologies, Inc.

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## Scap (NM\_001103162) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Scap (NM\_001103162) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Scap

**Synonyms:** 9530044G19; mKIAA0199

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001103162

ORF Size: 3828 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR218374).

OTI Disclaimer:

Sequence:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 001103162.1</u>

 RefSeq Size:
 4154 bp

 RefSeq ORF:
 3831 bp

 Locus ID:
 235623

 UniProt ID:
 Q6GQT6

 Cytogenetics:
 9 59.91 cM







## **Gene Summary:**

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. [UniProtKB/Swiss-Prot Function]