

## **Product datasheet for RC218251**

### OriGene Technologies, Inc.

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## Sterol carrier protein 2 (SCP2) (NM\_001007100) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Sterol carrier protein 2 (SCP2) (NM\_001007100) Human Tagged ORF Clone

Tag: Myc-DDK

**Symbol:** Sterol carrier protein 2

Synonyms: NLTP; NSL-TP; SCOX; SCP-2; SCP-CHI; SCP-X; SCPX

Mammalian Cell Ne

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC218251 representing NM\_001007100
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218251 representing NM\_001007100

Red=Cloning site Green=Tags(s)

MGFPEAARTHQIEAVPTSSASDGFKANLVFKEIEKKLEEEGEQFVKKIGGIFAFKVKDGPGGKEATWVVD VKNGKGSVLPNSDKKADCTITMADSDFLALMTGKMNPQSAFFQGKLKITGNMGLAMKLQNLQLQPGNAKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk8016">https://cdn.origene.com/chromatograms/mk8016</a> a05.zip

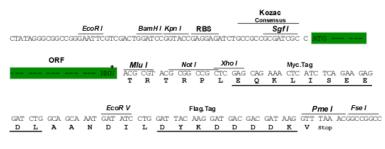
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001007100

ORF Size: 420 bp

**OTI Disclaimer:** 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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeg:** NM 001007100.3

 RefSeq Size:
 1438 bp

 RefSeq ORF:
 423 bp

 Locus ID:
 6342

 UniProt ID:
 P22307



Cytogenetics: 1p32.3

**Protein Pathways:** Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis

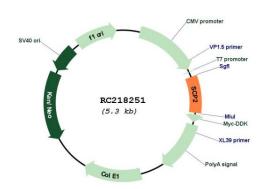
MW: 15.08 kDa

**Gene Summary:** This gene encodes two proteins: sterol carrier protein X (SCPx) and sterol carrier protein 2

(SCP2), as a result of transcription initiation from 2 independently regulated promoters. The transcript initiated from the proximal promoter encodes the longer SCPx protein, and the transcript initiated from the distal promoter encodes the shorter SCP2 protein, with the 2 proteins sharing a common C-terminus. Evidence suggests that the SCPx protein is a peroxisome-associated thiolase that is involved in the oxidation of branched chain fatty acids, while the SCP2 protein is thought to be an intracellular lipid transfer protein. This gene is highly expressed in organs involved in lipid metabolism, and may play a role in Zellweger syndrome, in which cells are deficient in peroxisomes and have impaired bile acid synthesis. Alternative splicing of this gene produces multiple transcript variants, some encoding

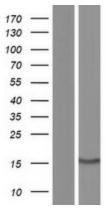
different isoforms.[provided by RefSeq, Aug 2010]

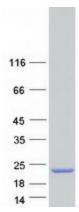
# **Product images:**



Circular map for RC218251







Western blot validation of overexpression lysate (Cat# [LY422798]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218251 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified SCP2 protein (Cat# [TP318251]). The protein was produced from HEK293T cells transfected with SCP2 cDNA clone (Cat# RC218251) using MegaTran 2.0 (Cat# [TT210002]).