

## Product datasheet for **RC231254**

### Sterol carrier protein 2 (SCP2) (NM\_001193617) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sterol carrier protein 2 (SCP2) (NM_001193617) 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 Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC231254 representing NM\_001193617  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACTGGAATTCCTATAATCAATGTCAACAATAACTGTGCTACTGGTTCTACTGCTTTGTTTATGGCCC  
 GCCAGCTGATTCAGGGTGGTGTGGCAGAATGTGTCTTGGCTCTTGGGTTTGAGAAGATGAGTAAGGGAAG  
 CCTTGAATAAAAATTTTTCAGATAGAACCATTCCCCTGATAAGCATGTTGACCTCTGATCAATAAGTAT  
 GGATTGTCTGCTCACCCAGTTGCTCCTCAGATGTTGGGTATGCTGGAAAAGAACATATGGAAAAATATG  
 GAACAAAATTTGAACACTTTGCAAAAATTTGGATGGAAAAATCATAAACATTCAGTTAATAACCCGATTC  
 CCAGTTCCAAGATGAATACAGTTTATAGTGAAGTATGGCATCTAAAGAAGTTTTTGTATTTTTGACTATC  
 TTACAATGTTGTCCACTTCAGATGGTGTGCAGCAGCAATTTTGGCCAGTGAAGCATTTGTACAGAAGT  
 ATGGCCTGCAATCAAAGCTGTGAAAATTTTGGCACAAGAAATGATGACTGATTTGCCAAGCTCGTTTGA  
 AGAAAAAGCATTATTAATAATGGTTGGCTTTGATATGAGTAAAGAAGCTGCAAGAAAATGCTATGAGAAA  
 TCTGGCCTGACACCAAATGATATTGACGTAATAGAACTTCACGATTGCTTTTCTACCAACGAACTCCTTA  
 CTTATGAAGCACTGGGACTCTGTCCAGAAGGACAAAGGTGCAACGCTGGTTGATAGAGGAGATAATACATA  
 TGGAGGAAAGTGGGTCAATACTAGTGGTGGACTGATTTCAAAGGGACACCCACTAGGCGCTACAGGT  
 CTTGCTCAGTGTGCAGAACTCTGCTGGCAGCTGAGAGGGGAAGCCGGAAGAGGCAAGTTCTGGTGCAA  
 AGGTGGCTCTGCAGCATAATTTAGGCATTGGAGGAGCTGTGGTTGAACACTCTACAAGATGGGTTTTCC  
 GGAAGCCGCCAGTTCTTTTGAAGTCACTCAAATTTGAAGCTGTTCCAACAGCTCTGCAAGTATGGATTT  
 AAGGCAATCTTGTTTTTAAGGAGATTGAGAAGAACTTGAAGAGGAAGGGGAACAGTTTGTGAAGAAAA  
 TCGGTGGTATTTTTGCCTCAAGGTGAAAGATGGCCCTGGGGTAAAGAGGCCACCTGGGTGGTGGATGT  
 GAAGAATGGCAAAGGATCAGTGCTTCTAACTCAGATAAGAAGGCTGACTGCACAATCACAATGGCTGAC  
 TCAGACTTCTGGCTTAAATGACTGGTAAAATGAATCCTCAGTCGGCCTTCTTCAAGGCAAATGAAAA  
 TCACTGGCAACATGGGTCTCGTATGAAGTTACAAAATCTTCAGCTTCAGCCAGGCAACGCTAAGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC231254 representing NM\_001193617  
 Red=Cloning site Green=Tags(s)

MTGIPIINVNNNCATGSTALLFMRQLIQGGVAECVLALGFEKMSKGLGIKFSDRTIPTDKHVDLLINKY  
 GLSAHPVAPQMFYAGKEHMEKYGTKIEHFAKIGWKNHKHSVNNPYSQFQDEYSLDEVMASKEVDFLTI  
 LQCCPTSDGAAAAILASEAFVQKYGLQSKAVEILAQEMMTDLPSSFEEKSIIKMGVFDMSKEAARKCYEK  
 SGLTPNDIDVIELHDCFSTNELLTYEALGLCPEGQATLVDRGDNTYGGKWWINPSSGLISKHPLGATG  
 LAQCAELCWQLRGEAGKRQVPGAKVALQHNLGIGGAVVVTLYKMGFPEAASSFRTHQIEAVPTSSASDGF  
 KANLVFKEIEKKLEEEGEQFVKKIGGIFAFKVKDGPGGKEATWVVDVKNKGKSVLPNSDKKADCTITMAD  
 SDFLALMTGKMNPQSAFFQGKLIKITGNMGLAMKLQNLQLQPGNAKL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8061\\_h05.zip](https://cdn.origene.com/chromatograms/mk8061_h05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001193617

**ORF Size:** 1398 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.

**RefSeq:** [NM\\_001193617.2](#)

**RefSeq ORF:** 1401 bp

**Locus ID:** 6342

**UniProt ID:** [P22307](#)

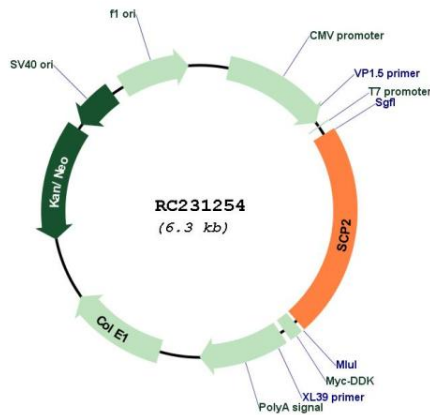
**Cytogenetics:** 1p32.3

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

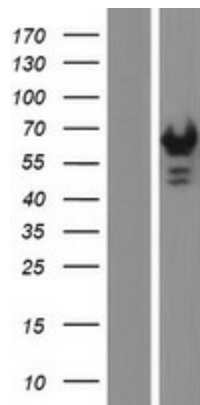
**MW:** 50.8 kDa

**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 RC231254



Western blot validation of overexpression lysate (Cat# [LY434253]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231254 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).