

Product datasheet for **RC219802**

Sterol carrier protein 2 (SCP2) (NM_002979) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Sterol carrier protein 2 (SCP2) (NM_002979) 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) |



[View online »](#)

ORF Nucleotide Sequence:

>RC219802 representing NM_002979
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCCTCTTCCCGTGGGAGCCTGCGACCCTGCGCCGGGTGTTGTTGGTGGGGTTGGCATGACCAAGT
 TTGTGAAGCCTGGAGCTGAGAATCAAGAGACTACCCTGACTTGGCAGAAGAAGCAGGCAAGAAGGCTTT
 AGCTGATGCACAGATCCCTTATTACAGCAGTGGACCAGGCATGTGTTGGCTATGTTTTGGTACTCTACC
 TGTGGGCAGAGGGCTATCTATCACAGTTTGGGAATGACTGGAATCCTATAATCAATGTCAACAATAACT
 GTGCTACTGGTTCTACTGCTTTGTTTATGGCCCGCAGCTGATTCAGGGTGGTGGCAGAATGTGCTT
 GGCTCTTGGGTTTGAAGAAGTAGTAAGGGAAGCCTTGAATAAAAATTTTCAGATAGAACCATTCCCCT
 GATAAGCATGTTGACCTCTGATCAATAAGTATGGATTGTCTGCTCACCCAGTTGCTCCTCAGATGTTTG
 GGTATGCTGGAAGAACAATATGAAAAATATGGAACAAAAATGAACACTTTGCAAAAAATGGATGGAA
 AAATCATAAACATTCAGTTAATAACCCGATTCCAGTCCAAGATGAGTACAGTTTAGATGAAGTGATG
 GCATCTAAAGAAGTTTTGATTTTTGACTATCTTACAATGTTGTCCCACTTCAGATGGTCTGCAGCAG
 CAATTTTGGCCAGTGAAGCATTGTACAGAAGTATGGCCTGCAATCCAAAGCTGTGGAAATTTGGCACA
 AGAAATGATGACTGATTTGCCAAGCTCGTTTGAAGAAAAAGCATTATTAATGTTGGCTTTGATATG
 AGTAAAGAAGCTGCAAGAAAATGCTATGAGAAATCTGGCCTGACACCAATGATATTGACGTAATAGAAC
 TTCACGATTGCTTTTCTACCAACGAACCTCTACTTATGAAGCACTGGGACTCTGTCCAGAAGGACAAGG
 TGCAACGCTGGTGTAGAGGAGATAATACATATGGAGGAAAGTGGGTCATAATCCTAGTGGTGGACTG
 ATTTCAAAGGGACACCCACTAGGCGCTACAGGCTTGTCTAGTGTGCAGAACTCTGCTGGCAGCTGAGAG
 GGAAGCCGGAAGAGGCAAGTTCTGGTGCAGGTTGGCTCTGCAGCATAATTTAGGCAATGGAGGAGC
 TGTGGTTGTAACACTCTACAAGATGGGTTTTCCGGAAGCCGCGCAGTTCTTTTGAAGTCACTCAAAATGAA
 GCTGTTCAACCAAGCTCTGCAAGTATGGATTTAAGGCAATCTTGTTTTTAAGGAGATTGAGAAGAAAC
 TTGAAGAGGAAGGGGAACAGTTTGTGAAGAAAATCGGTGGTATTTTTGCCTTCAAGGTGAAAGATGGCC
 TGGGGGTAAAGAGGCCACCTGGGTGGTGGATGTGAAGAAATGGCAAGGATCAGTGCTTCTAACTCAGAT
 AAGAAGGCTGACTGCACAATCACAATGGCTGACTCAGACTTCTGGCTTAAATGACTGGTAAAATGAATC
 CTCAGTCGGCCTTCTTTCAAGGCAAATGAAAATCACTGGCAACATGGGTCTCGCTATGAAGTTACAAAA
 TCTTCAGCTTCAGCCAGGCAACGCTAAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219802 representing NM_002979
 Red=Cloning site Green=Tags(s)

MSSSPWEPATLRRVVFVGVGTMKFKVPGAENSRDYPDLAEEAGKKALADAQIPYSAVDQACVGYVFGDST
 CGQRAIYHSLGMTGIPIINVNNNCATGSTALLFMRQLIQGGVAEVLALGFEMSKGSLGIKFSDRTIPT
 DKHVDLLINKYGLSAHPVAPQMFYAGKEHMEKYGTKIEHFAKIGWKNHKHSVNNPYSQFQDEYSLDEV
 ASKEVDFDLTILQCCPTSDGAAAAILASEAFVQKYGLQSKAVEILAQEMMTDLSPSFEESIIKMGVDFM
 SKEAARKCYEKSLTPNDIDVIELHDCFSTNELLYEALGLCPEGQATLVDRGDNTYGGKVVINPSGGL
 ISKGHPLGATGLAQCAELCWQLRGEAGKRQVPGAKVALQHNLGIGGAVVVTLYKMGFPEAASSFRTHQIE
 AVPTSSASDGFKANLVFKEIEKKLEEEGEQFVKKIGGIFAFKVKDGPGGKEATWVVDVKNKGKSVLPNSD
 KKADCTITMADSDFLALMTGKMNPQSAFFQGLKITGNMGLAMKLQNLQLQPGNAKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6111_f08.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_002979

ORF Size: 1641 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_002979.5](#)

RefSeq Size: 2697 bp

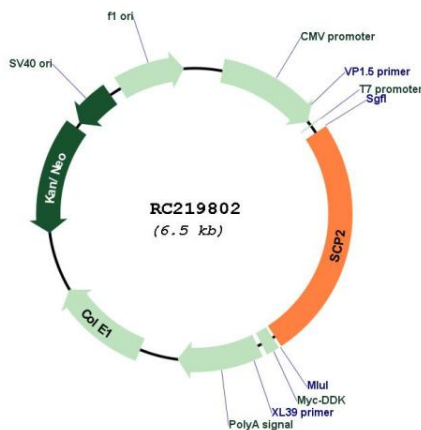
RefSeq ORF: 1644 bp

Locus ID: 6342

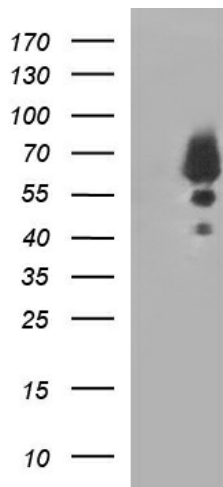
UniProt ID: [P22307](#)

| | |
|--------------------------|---|
| Cytogenetics: | 1p32.3 |
| Domains: | thiolase, SCP2 |
| Protein Pathways: | Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis |
| MW: | 58.8 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] |

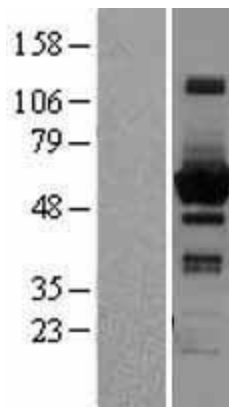
Product images:



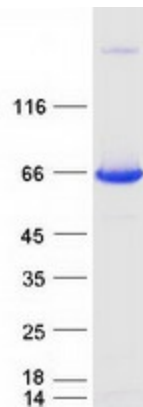
Circular map for RC219802



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SCP2 (Cat# RC219802, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SCP2 (Cat# [TA507248]). Positive lysates [LY401042] (100ug) and [LC401042] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401042]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219802 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SCP2 protein (Cat# [TP319802]). The protein was produced from HEK293T cells transfected with SCP2 cDNA clone (Cat# RC219802) using MegaTran 2.0 (Cat# [TT210002]).