

Product datasheet for **SC127431**

Sterol carrier protein 2 (SCP2) (NM_002979) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sterol carrier protein 2 (SCP2) (NM_002979) Human Untagged Clone
Tag:	Tag Free
Symbol:	Sterol carrier protein 2
Synonyms:	NLTP; NSL-TP; SCOX; SCP-2; SCP-CHI; SCP-X; SCPX
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene ORF within SC127431 sequence for NM_002979 edited (data generated by NextGen Sequencing)

```

ATGTCCTCTTCCCCGTGGGAGCCTGCGACCCTGCGCCGGGTGTTTCGTGGTGGGGTTGGC
ATGACCAAGTTTGTGAAGCCTGGAGCTGAGAATCAAGAGACTACCCTGACTTGGCAGAA
GAAGCAGGCAAGAAGGCTTTAGCTGATGCACAGATCCCTTATTCAGCAGTGGACCAGGCA
TGTGTTGGCTATGTTTTTGGTGACTCTACCTGTGGCAGAGGGCTATCTATCACAGTTTG
GGAATGACTGGAATTCATAATCAATGTCAACAATAACTGTGCTACTGGTTCTACTGCT
TTGTTTATGGCCCGCAGCTGATTCAGGGTGGTGTGGCAGAATGTGCTTGGCTCTTGGG
TTTGAGAAGATGAGTAAGGGAAGCCTTGAATAAAAATTTTCAGATAGAACCATTCCCACT
GATAAGCATGTTGACCTCCTGATCAATAAGTATGGATTGTCTGCTCACCCAGTTGCTCCT
CAGATGTTTGGGTATGCTGGAAAAGAACATATGGAAAAATGGAACAAAAATTGAACAC
TTTGCAAAAAATTGGATGGAAAAATCATAAACATTCAGTTAATAACCCGATTCCCAAGTTC
CAAGATGAGTACAGTTTAGATGAAGTATGGCATCTAAAGAAGTTTTTGATTTTTGACT
ATCTTACAATGTTGTCCCACTTCAGATGGTGTGTCAGCAGCAATTTTGGCCAGTGAAGCA
TTTGTACAGAAGTATGGCCTGCAATCCAAGCTGTGGAATTTTGGCACAAGAAATGATG
ACTGATTTGCCAAGCTCGTTTGAAGAAAAAGCATTATTAATAATGGTTGGCTTTGATATG
AGTAAAGAAGCTGCAAGAAAAATGCTATGAGAAATCTGGCCTGACACCAAAATGATATTGAC
GTAATAGAACTTCACGATTGCTTTTCTACCAACGAACTCCTTACTTATGAAGCACTGGGA
CTCTGTCCAGAAGGACAAGGTGCAACGCTGGTTGATAGAGGAGATAATACATATGGAGGA
AAGTGGGTCAATAATCCTAGTGGTGGACTGATTTCAAAGGGACACCCACTAGGCGCTACA
GGTCTTGCTCAGTGTGCAAGACTCTGCTGGCAGCTGAGAGGGGAAGCCGAAAGAGGCAA
GTTCTGGTGCAAGGTGGCTCTGCAGCATAATTTAGGCATTGGAGGAGCTGTGGTTGTA
ACACTCTACAAGATGGGTTTTCCGGAAGCCGCCAGTTCTTTTGAAGTCACTCAAAATGAA
GCTGTTCCAACCAAGCTCTGCAAGTATGATGATTTAAGGCAAACTTGTTTTTTAAGGAGATT
GAGAAGAACTTGAAGAGGAAGGGAACAGTTTGTGAAGAAAATCGTGGTATTTTTGCC
TTCAAGGTGAAAGATGGCCCTGGGGTAAAGAGGCCACCTGGGTGGTGGATGTGAAGAAT
GGCAAAGGATCAGTGCTTCTAACTCAGATAAGAAGGCTGACTGCACAATCACAATGGCT
GACTCAGACTTCCCTGGCTTAAATGACTGGTAAATGAATCCTCAGTCGGCCTTCTTTCAA
GGCAAATTGAAAATCACTGGCAACATGGGTCTCGCTATGAAGTTACAAAATCTTCAGCTT
CAGCCAGGCAACGCTAAGCTCTGA
    
```

Clone variation with respect to NM_002979.4
609 a=>g

5' Read Nucleotide Sequence:

```

>OriGene 5' read for NM_002979 unedited
GGATTTTGTAAATACGACTTACTATAGGGNCCGGCCGCGCAATTCGGCACGAGTCTCCGC
CTGTCAAGTCCCGCAGTGTCCGCGGCGCCCGCCCGGTCCTGCACTGGTGCAGCCATGT
CCTCTTCCCCGTGGGAGCCTGCGACCCTGCGCCGGGTGTTTCGTGGTGGGGTTGGCATGA
CCAAGTTTGTGAAGCCTGGAGCTGAGAATCAAGAGACTACCCTGACTTGGCAGAAGAAG
CAGGCAAGAAGGCTTTAGCTGATGCACAGATCCCTTATTCAGCAGTGGACCAGGCATGTG
TTGGCTATGTTTTTGGTGACTCTACCTGTGGCAGAGGGCTATCTATCACAGTTTGGGAA
TGACTGGAATTCATAATCAATGTCAACAATAACTGTGCTACTGGTTCTACTGCTTTGT
TTATGGCCCGCCAGCTGATTCAGGGTGGTGTGGCAGAATGTGCTTGGCTCTTGGGTTTG
AGAAGATGAGTAAGGGAAGCCTTGAATAAAAATTTTCAGATAGAACCATTCCCACTGATA
AGCATGTTGACCTCCTGATCAATAAGTATGGATTGTCTGCTCACCCAGTTGCTCCTCAGA
TGTTTGGGTATGCTGGGAAAGACATATGGAATAATGGAACANAATGAACACTTTGC
ANAAATGGATGGAAAAATCATANACATTCAGTTAAATACCCGATTCCCAAGTTCGAAGA
TGAGTACAGTTTAGATGAAGTATGGCATCTAAAGAAGTTTTTGATTTTTGACTATNCT
TACATGTTGTCCCACTTCAGATGGTGTGCNAGCAGCATTTTGGGCAGTGAAGCATTTGT
ACAGAAGTATGGCCTGCAATCCAAGCTGTTGAAATTTTGGCACCAGAAATGATGACTGAT
TTGGCAAAGCTCGTTTGGAGAAAAGCATTATTAATGGNTGGCTTTGGATTGAGTAANG
AAGCTGCCAGAAATGCTTTGAGAAATCTG
    
```

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002979 unedited GTACGACTATGNNACCGCGGCCGAATCTATGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGACGCCGAAAAGTTATTTTAATTTTCTATTAACATTCTCTCAAAGCA TTATTTTATCCTATATCTCACTGAATTTAAGAAATAACATTAGGATTAGAAAACTAGG AAAAAGATAAATGCCGATAATTAACCTACCTGAAAAAGGAAAATTATAACCAAGGACT GAGAACGTTATAAATGGAATGAGATTATAATTTGAAAACTGCATCTGAAAGCAAATTT ATTGGTCAATTATTCTTAATGATGGGGTTTTATGACTAATACACTGGTTTTTCAAGAAGG AAACCCATGTTAAAAATTTTTATTTTAAAAATAGCCTGTGTTCAAGCTCTGATCATA TTTCTTTTATTTTGATTTGGGAAGAAAATACCGTTCTGATAGCATGAAATGCAAAATTT TTAGATTTTAAATCTCACTAATTTAAGAATTTGAGAAATTGATTAATGACATGGAGT GCACAACACTAATTACTGGCCAGCTGTTGGCATTGCGTTTCTTACTTAGTTCTCCCAAGG AAAACCTTAAATGAATCTTCAGCAGAATATCCTTAAATGCTTTGTTAGCCAACAAAA GCTTTTTTGATTACATAGTTCTTTGGATTTTACTGTTCTAATTTTATTCTGGAAC TCA TTTTACCCAGACCATGATTACCATATTAATTTGTNATGCACAGTTGTATTGCATTCCC GCAAAGCAGTAGTTACCCTCCGGCTCTTTTCCCCCGACCTTGAAAAACAGGGTTGGGCC CACCCATTAGAAACAATCTTTCCCGGCCATTGGCATAGGGGA
Restriction Sites:	NotI-NotI
ACCN:	NM_002979
Insert Size:	2750 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_002979.3</u> , <u>NP_002970.2</u>
RefSeq Size:	2697 bp
RefSeq ORF:	1644 bp
Locus ID:	6342
UniProt ID:	<u>P22307</u>
Cytogenetics:	1p32.3
Domains:	thiolase, SCP2
Protein Pathways:	Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1, also known as SCPx).