

Product datasheet for **RG231279**

Sterol carrier protein 2 (SCP2) (NM_001193600) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sterol carrier protein 2 (SCP2) (NM_001193600) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCP2
Synonyms:	NLTP; NSL-TP; SCOX; SCP-2; SCP-CHI; SCP-X; SCPX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG231279 representing NM_001193600
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCCTCTTCCCGTGGGAGCCTGCGACCCTGCGCCGGGTGTTGTTGGTGGGGTTGGCATGACCAAGT
 TTGTGAAGCCTGGAGCTGAGAATCAAGAGACTACCCTGACTTGGCAGAAGAAGCAGGCAAGAAGGCTTT
 AGCTGATGCACAGATCCCTTATTAGCAGTGGACCAGGCATGTGTTGGCTATGTTTTGGTGGCAGAA
 TGTGTCTTGGCTCTGGGTTTGAAGAAGTGAAGGGAAGCCTTGAATAAAAATTTTTCAGATAGAACCA
 TTTCCACTGATAAGCATGTTGACCTCCTGATCAATAAGTATGGATTGCTGCTCACCAGTTGCTCCTCA
 GATGTTTTGGGTATGCTGGAAAAGACATATGGAATAATGGAACAAAATTTGAACACTTTGCAAAAATT
 GGTGGAATAACATAACATTCAGTTAATAACCCGATTTCCAGTTCGAAGTGAATACAGTTTAGATG
 AAGTATGGCATCTAAGAAGTTTTGATTTTTGACTATCTTACAATGTTGCCACTTCAGATGGTGC
 TGCAGCAGCAATTTGGCCAGTGAAGCATTGTACAGAAGTATGGCCTGCAATCCAAAGCTGGAAATT
 TTGGCACAAAGAAATGATGACTGATTTGCCAAGCTCGTTTGAAGAAAAAGCATTATAAAATGGTTGGCT
 TTGATATGAGTAAAGAAGCTGCAAGAAAATGCTATGAGAAATCTGGCCTGACACCAATGATATTGACGT
 AATAGAATTCACGATTGCTTTTCTACCAACGAACTCCTTACTTATGAAGCACTGGGACTCTGTCCAGAA
 GGCAAGGTGCAACGCTGGTTGATAGAGGAGATAATACATATGGAGGAAAGTGGGTGATAAATCCTAGTG
 GTGGACTGATTTCAAAGGGACACCCACTAGGCGCTACAGGTCTTGCTCAGTGTGCAGAACTCTGTGGCA
 GCTGAGAGGGGAAGCCGAAAGAGGCAAGTTCCTGGTCAAAGGTGGCTCTGCAGCATAATTTAGGCATT
 GGAGGAGCTGTGGTTGTAACACTCTACAAGATGGGTTTTCCGGAAGCCCGCAGTTCTTTTAGAATCATC
 AAATTGAAGCTGTTCCAACAGCTCTGCAAGTGGATTTAAGGCAAACTTTGTTTTAAGGAGATTGA
 GAAGAACTTGAAGAGGAAGGGGAACAGTTTGTGAAGAAAATCGGTGGTATTTTTGCCTCAAGGTGAAA
 GATGGCCCTGGGGTAAAGAGGCCACCTGGGTGGTGGATGTAAGAATGGCAAAGGATCAGTCTTCTTA
 ACTCAGATAAGAAGGCTGACTGCACAATCACAATGGCTGACTCAGACTTCTGGCTTTAATGACTGGTAA
 AATGAATCCTCAGTCGGCCTTCTTCAAGGCAATTTGAAAATCACTGGCAACATGGGTCTCGCTATGAAG
 TTACAAAATCTCAGTTCAGCCAGGCAACGCTAAGCTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG231279 representing NM_001193600
 Red=Cloning site Green=Tags(s)

MSSSPWEPATLRRVVFVGVGMKFKVPGAENSRDYPDLAEEAGKKALADAQIPYSAVDQACVGYVFGVAE
 CVLALGFEMSKGSLGKIFSDRTIPTDKHVDLLINKYGLSAHPVAPQMFYAGKEHMEKYGTKIEHFAKI
 GWKNHKHSVNNPYSQFQDEYSLDEVMASKEVDFLITLQCCPTSDGAAAAILASEAFVQKYGLQSKAVEI
 LAQEMMTDLPSFEEKSIKMGVDFMSKEAARKCYEKSGLTPNDIDVIELHDCFSTNELLTYEALGLCPE
 GGATLVDRGDNTYGGKVVINPSSGLISKGHPLGATGLAQCAELCWQLRGEAGKRQVPGAKVALQHNLGI
 GGAVVVTLYKMGFPEAASSFRTHQIEAVPTSSASDGFKANLVFKEIEKKLEEEGEQFVKKIGGIFAFKVK
 DPGGGKEATWVVDVKNKGKSVLPNSDKKADCTITMADSDFLALMTGKMNPQSAFFQGLKITGNMGLAMK
 LQNLQLQPGNAKL

TRTRPLE – GFP Tag – V

Restriction Sites:

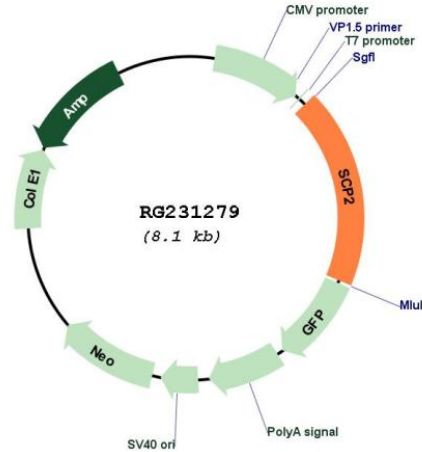
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001193600

ORF Size: 1509 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_001193600.2](#)

RefSeq Size: 2593 bp

RefSeq ORF: 1512 bp

Locus ID: 6342

Cytogenetics: 1p32.3

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]