

Product datasheet for **SC328431**

SCO2 (NM_001169109) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCO2 (NM_001169109) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCO2
Synonyms:	CEMCOX1; ECGF1; Gliostatin; MC4DN2; MYP6; PD-ECGF; SCO1L; TdRPase; TP; TYMP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328431 representing NM_001169109. Blue=Insert sequence Red=Cloning site Green=Tag(s)

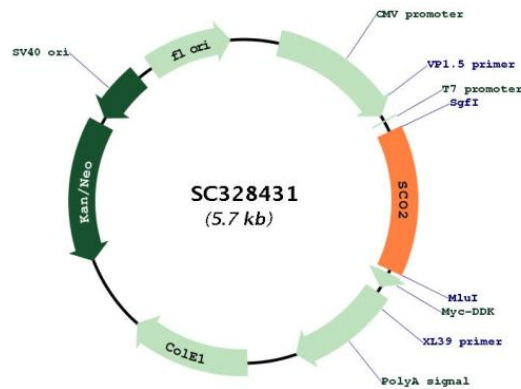
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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGCTGCTGACTCGGAGCCCCACAGCTTGGCACAGGCTCTCTCAGCTCAAGCCTCGGGTCTCCCT
GGGACCTGGGAGGCCAGGCCCTGCATCTGAGGTCCTGGCTTTTGTCAAGGCAGGGCCCTGCAGAGACA
GGTGGGCAGGGCCAGCCCCAGGGCCCTGGGCTTCGAACCCGGCTGCTGATCACAGGCCTGTTCCGGGCT
GGACTCGGTGGGCTGGCTGGCCCTGAGGGCTGAGAAGGAGAGGCTGCAGCAGCAAAGCGAACAGAA
GCCCTGCGCCAGGCAGCTGTGGCCAGGGCGACTTCCACCTGCTGGATCACAGAGCCGGGCTCGCTGC
AAGGCTGACTTCCGGGGCCAGTGGGTGCTGATGTACTTTGGCTTCACTACTGCCCTGACATCTGCCCA
GACGAGCTGGAGAAGCTGGTGCAGGTGGTGCAGGAGCTGGAAGCAGAGCCTGGTTTGCCTCCAGTGACG
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CACCCAAGACTGTTGGGTCTGACCGGCTCCACCAAACAGGTTGCCAGGCTAGTCACAGTTACCGCGTG
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CTCAACCCTGACGGCCTTTCACGGATTACTACGGCCGGAGCAGATCGGCTGAGCAGATCTCAGACAGT
GTGCGCGGCACATGGCGGCTTCCGCAGTGTCTGTCTTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001169109

Insert Size: 801 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001169109.1](#)

RefSeq Size: 1051 bp

RefSeq ORF: 801 bp

Locus ID: 9997

UniProt ID: [O43819](#)

Cytogenetics: 22q13.33

Protein Families: Druggable Genome

MW: 29.8 kDa

Gene Summary: Cytochrome c oxidase (COX) catalyzes the transfer of electrons from cytochrome c to molecular oxygen, which helps to maintain the proton gradient across the inner mitochondrial membrane that is necessary for aerobic ATP production. Human COX is a multimeric protein complex that requires several assembly factors; this gene encodes one of the COX assembly factors. The encoded protein is a metallochaperone that is involved in the biogenesis of cytochrome c oxidase subunit II. Mutations in this gene are associated with fatal infantile encephalomyopathy and myopia 6. [provided by RefSeq, Oct 2014]
Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1, 2, 3 and 4 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.