

Product datasheet for **RG202026**

SCO1 (NM_004589) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCO1 (NM_004589) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCO1
Synonyms:	MC4DN4; SCOD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202026 representing NM_004589 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGATGCTGGTCCTAGTACCCGGACGAGTTATGCGGCCTCTGGGTGGCCAACTTTGGCGCTTCTTGC
 CTCGCGGACTCGAGTTTGGGGCCAGCCGAGGGGACTGCGAGAGTCTTGCTGAGGCAGTTCTGCGCGCG
 GCAAGCGGAGGCGTGGCGTGCCTCGGGGCGCCCTGGCTATTGCCTGGGAACCCGGCCCTCAGCACTGCG
 AGGCCGCCACCCCGTGGTCGAGAAGGGCCCCGGAGACTCCACGCGCCCTCGAAGCCCGGGCCTGTTT
 CCTGGAAGTCTTTAGCAATCACATTTGCTATTGGAGGAGCTTTACTGGCTGGAATGAAGCACGTCAAGAA
 AGAAAAGGCAGAGAAGTTAGAGAAGGAACGGCAGCGACACATCGCAAGCCTTTACTTGGGGGACCGTTT
 TCCTCACAACCTCATACTGGGGAGCGTAAACTGACAAGGACTACTTGGGTCAGTGGTTATTGATTATT
 TTGGCTTCACTCATTGCCTGATGTCTGTCCAGAAGAACTAGAAAAGATGATTCAAGTCGTGGATGAAAT
 AGATAGCATTACAACCTCTGCCAGATCTAACTCCACTTTTCATCAGCATTGACCCAGAGAGGGACACAAAA
 GAAGCCATCGCAAATTATGTGAAAGAATTTCTCCAAACTGGTTGGCTTGACTGGCACGAGAGAAGAGG
 TCGATCAAGTGGCCAGAGCATACAGAGTGTATTACAGCCCTGGCCCCAAGGACGAAGATGAAGACTACAT
 AGTGGATCACACAATAAATGTACTTGATTGGACCAGATGGTGAGTTTCTAGATTATTTGGCCAGAAC
 AAGAGGAAGGGAGAAATAGCTGCTTCAATTGCCACACACATGAGGCCATACAGAAAAAAGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


[View online »](#)

Protein Sequence: >RG202026 representing NM_004589
 Red=Cloning site Green=Tags(s)

MAMLVLVPGRVMRPLGGQLWRFLPRGLEFWGPAEGTARVLLRQFCARQAEAWRASGRPGYCLGTRPLSTA
 RPPPPWSQKGPGDSTRPSKPGPVSWKSLAITFAIGGALLAGMKHVKKKEAEKLEKERQRHIGKPLLGGPF
 SLTTHTGERKTDKDYLGQWLLIYFGFTHCPDVCPEELEKMIQVDEIDSITTLPLDLPLFISIDPERDTK
 EAIANYVKEFSPKLVGLTGTRREEVDQVARAYRVYVSPGPKDEDEDYIVDHTIIMYLIGPDGEFLDYFGQN
 KRKGEIAASIATHMRPYRKKS

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004589

ORF Size: 903 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_004589.4](#)

RefSeq Size: 1719 bp

RefSeq ORF: 906 bp

Locus ID: 6341

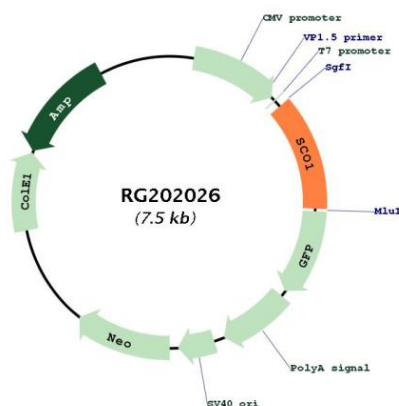
UniProt ID: [Q75880](#)

Cytogenetics: 17p13.1

Domains: SCO1-SenC

Gene Summary: Mammalian cytochrome c oxidase (COX) catalyzes the transfer of reducing equivalents from cytochrome c to molecular oxygen and pumps protons across the inner mitochondrial membrane. In yeast, 2 related COX assembly genes, SCO1 and SCO2 (synthesis of cytochrome c oxidase), enable subunits 1 and 2 to be incorporated into the holoprotein. This gene is the human homolog to the yeast SCO1 gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202026