

## Product datasheet for RC202026

### SCO1 (NM\_004589) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SCO1 (NM_004589) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCO1
Synonyms:	MC4DN4; SCOD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202026 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGGCGATGCTGGTCCTAGTACCCGGACGAGTTATGCGGCCTCTGGGTGGCCAACTTGGCGCTTCTTGC  
CTCGCGGACTCGAGTTTTGGGGCCAGCCGAGGGGACTGCGAGAGTCTTGCTGAGGCAGTTCTGCGCGCG  
GCAAGCGGAGGCGTGGCGTGCCTCGGGGCGCCCTGGCTATTGCCTGGGAACCCGGCCCTCAGCACTGCC  
AGGCCGCCACCCCGTGGTGCAGAAAGGCCCGGAGACTCCACGCGCCCTCGAAGCCCGGCCCTGTTT  
CCTGGAAGTCTTTAGCAATCACATTTGCTATTGGAGGAGCTTTACTGGCTGGAATGAAGCACGTCAAGAA  
AGAAAAGGCAGAGAAGTTAGAGAAGGAACGGCAGCGACACATCGCAAGCCTTTACTTGGGGACCGTTT  
TCCTCACAACCTACTGGGGAGCGTAAAAGTACAAGGACTACTTGGGTCAAGTGGTTATTGATTATT  
TTGGCTTCACTCATTGCCCTGATGTCTGTCCAGAAGAACTAGAAAAGATGATTCAAGTCGTGGATGAAAT  
AGATAGCATTACAACCTGCCAGATCTAACTCCACTTTTCATCAGCATTGACCCAGAGAGGGACACAAAA  
GAAGCCATCGCAAATTATGTGAAAGAATTTCTCCAAACTGGTTGGCTTACTGGCAGCAGAGAGAAGAGG  
TCGATCAAGTGGCCAGAGCATACAGAGTGTATTACAGCCCTGGCCCAAGGACGAAGATGAAGACTACAT  
AGTGGATCACACAATAAATGTACTTGGTGGACCAGATGGTGGAGTTTCTAGATTATTTGGCCAGAAC  
AAGAGGAAGGGAGAAATAGCTGCTTCAATTGCCACACACATGAGGCCATACAGAAAAAAGAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC202026 protein sequence  
Red=Cloning site Green=Tags(s)

MAMLVLPGRVMRPLGGQLWRFLPRGLEFWGPAEGTARVLLRQFCARQAEAWRASGRPGYCLGTRPLSTA  
 RPPPPWSQKGGDSTRPSKPGPVSWKSLAITFAIGGALLAGMKHVKKEKAEKLEKERQRHIGKPLLGGPF  
 SLTTHTGERKTDKDYLGQWLLIYFGFTHCPDVCPEELEKMIQVVDEIDSITTLPLDPLFLISIDPERDTK  
 EAIANYVKEFSPKLVGLTGTREEVDQVARAYRVVYSPGPKDEDEDYIVDHTIIMYLIIGPDGEFLDYFGQN  
 KRKGEIAASIATHMRPYRKKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6309\\_e12.zip](https://cdn.origene.com/chromatograms/mk6309_e12.zip)

**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.

**RefSeq:** [NM\\_004589.4](#)

**RefSeq Size:** 1768 bp

**RefSeq ORF:** 906 bp

**Locus ID:** 6341

**UniProt ID:** [O75880](#)

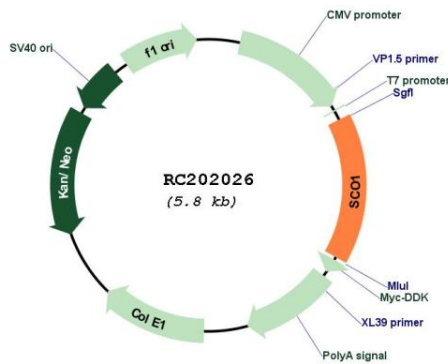
**Cytogenetics:** 17p13.1

**Domains:** SCO1-SenC

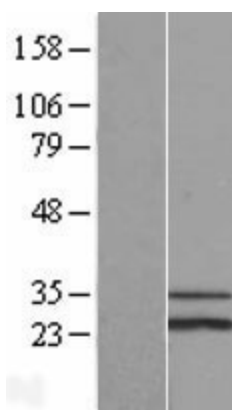
**MW:** 33.8 kDa

**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]

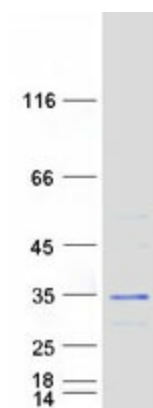
**Product images:**



Circular map for RC202026



Western blot validation of overexpression lysate (Cat# [LY417885]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202026 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SCO1 protein (Cat# [TP302026]). The protein was produced from HEK293T cells transfected with SCO1 cDNA clone (Cat# RC202026) using MegaTran 2.0 (Cat# [TT210002]).