

Product datasheet for **RC220802**

SUOX (NM_001032386) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUOX (NM_001032386) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUOX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220802 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCTGCTGCACAGAGCTGTGGTCTCAGGCTCCAACAGGCCTGCAGACTCAAGTCAATCCCCTCAA
 GGATCTGCATTCAGGCCCTGCTCCACAAATGATTCAATTCAGCCCCAGCGCCCAGCCTCACCTTCTCTGG
 TGATAACTCCAGCACCCAGGGATGGAGAGTCTATGGGGACCCTATTAGGTCTCGGTGCAGTGTGGCCTAT
 CAGGACCATCGGTGTAGGGCTGCTCAGGAGTCAACACACATATACACTAAGGAGGAAGTGAAGTCCACACA
 CCAGCCCTGAGACTGGGATCTGGGTGACTCTGGGCTCTGAGGTCTTTGATGTCACAGAATTTGTGGACCT
 ACATCCAGGGGGCCCTTCAAAGCTGATGCTAGCAGCTGGGGTCCCCTAGAGCCCTTCTGGGCCCTCTAT
 GCTGTTACAACACAGTCCCATGTGCGTGAAGTACTGGCTCAGTACAAGATTGGGGAGCTGAATCCTGAAG
 ACAAGGTAGCCCCACCGTGGAGACCTCTGACCCTTATGCTGATGATCCTGTACGTACCCAGCCCTGAA
 GGTC AACAGCCAGCGGCCCTTAAATGCAGAGCCTCCCCCTGAGCTGCTGACAGAAAACATCACACCC
 AACCTATCTTCTCACCCGGAACCATCTGCCTGTACCTAACCTGGATCCAGACACCTATCGCTTACACG
 TAGTAGGAGCACCTGGGGTCACTGCTCTCTTCCCTGGATGACTTGCAACAACCTTCCAGGTACGA
 GATCACAGTCACTCTGCAGTGTGCCGGAACCGACGCTCTGAGATGACTCAGGTCAAAGAAGTAAAAGGT
 CTGGAGTGGAGAACAGGAGCCATCAGCACTGCACGCTGGGCTGGGGCACGGCTCTGTGATGTGTTAGCCC
 AGGCTGGCCACCAACTCTGTGAAACTGAGGCCACGCTGCTTTGAGGGACTGGACTCAGACCCTACTGG
 GACTGCCTATGGAGCATCCATCCCTCTGGCTCGGGCATTGACCTGAAGCTGAGGTCTGCTGGCATAT
 GAGATGAATGGGACGCTCTGCCACGTGACCACGGCTCCCTGTGCGTGTGGTGGTTCCTGGAGTGGTGG
 GTGCCCGCCATGTCAAATGGCTGGGACAGTGAAGTGTGACAGCAGAGGAAAGTTACAGCCACTGGCAACG
 CGGGATTACAAAGGCTTCTCTCCATCTGTGACTGGGAGACTGTAGATTTTACTCTGCTCCATCCATT
 CAGGAACCTCTGTCCAGTCCGCCATCACAGACCCCGGGATGGAGAGACTGTAGAATCAGGGGAGGTGA
 CCATCAAGGGCTATGCATGGAGTGGTGGTGGCAGGGCTGTGATCCGGGTGGATGTGTCTCTGGATGGGG
 CCTAACCTGGCAGGTGGCTAAGCTGGATGGAGAGGAACAGCGCCCAGGAAGGCCGGGCATGGCGTCTG
 TGGCAGTTGAAAGCCCTGTGCCAGCTGGACAAAAGGAACGAACATTGTTTGTAAAGCTGTGGATGATG
 GTTACAATGTGCAGCCAGACACCGTGGCCCAATCTGGAACCTGCGAGGTGTTCTCAGCAATGCCTGGCA
 TCGTGTCCATGTCTATGTCTCCCA

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220802 protein sequence
 Red=Cloning site Green=Tags(s)

MLLLHRAVVLRLQQACRLKSIPSRICIQACSTNDSFQPQRPSLTFSGDNSSTQGWRVMGTLGLGAVLAY
 QDHCRAAQESTHIYTKKEEVSSHTSPETGIWVTLGSEVFDVTEFVDLHPGGPSKLM LAAGGLEPFWALY
 AVHNQSHVRELLAQYKIGELNPEDKVAPT VETSDPYADDPVRHPALKVNSQRPFNAPPELLTENYITP
 NPIFFTRNHL PVPNLDPDTRHLHVVGAPGGQSLSLDLDLHNFPRYEITVTLQCAGNRRSEMTQVKEVKG
 LEWRTGAI STARWAGARLCDVLAQAGHQLCETEAHVCFEGLSDPTGTAYGASIP LARAMDPEAEVLLAY
 EMNGQPLPRDHGFPVRVVVPGVVGARHVKWLGRVSVQPEESYSHWQRDYKGFSPSVDWETVDFDSAPSI
 QELPVQSAITEPRDGETVESGEVTIKGYAWSGGGRAVIRVDVSLDGGLTWQVAKLDGEEQRPRKAWAWRL
 WQLKAPVPAGQKELNIVCKAVDDGYNVQPD TVAPIWNLRGVL SNAWHRVHVYVSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6355_f05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001032386

ORF Size: 1635 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_001032386.1](#), [NP_001027558.1](#)

RefSeq Size: 2438 bp

RefSeq ORF: 1638 bp

Locus ID: 6821

UniProt ID: [P51687](#)

Cytogenetics: 12q13.2

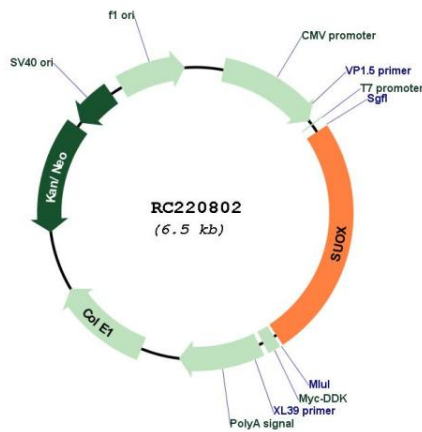
Protein Families: Druggable Genome

Protein Pathways: Sulfur metabolism

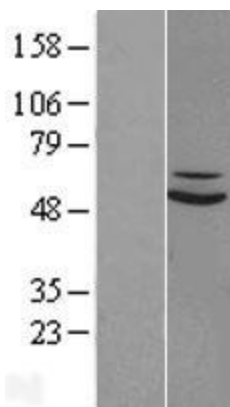
MW: 60.3 kDa

Gene Summary: Sulfite oxidase is a homodimeric protein localized to the intermembrane space of mitochondria. Each subunit contains a heme domain and a molybdopterin-binding domain. The enzyme catalyzes the oxidation of sulfite to sulfate, the final reaction in the oxidative degradation of the sulfur amino acids cysteine and methionine. Sulfite oxidase deficiency results in neurological abnormalities which are often fatal at an early age. Alternative splicing results in multiple transcript variants encoding identical proteins. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220802



Western blot validation of overexpression lysate (Cat# [LY422322]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC224152] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).