

Product datasheet for **RG220802**

SUOX (NM_001032386) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUOX (NM_001032386) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SUOX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG220802 representing NM_001032386
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGCTGCTGCACAGAGCTGTGGTCTCAGGCTCCAACAGGCCTGCAGACTCAAGTCAATCCCCTCAA
 GGATCTGCATTCAGGCCTGCTCCACAAATGATTCAATTCAGCCCCAGCGCCCAGCCTCACCTTCTCTGG
 TGATAACTCCAGCACCCAGGGATGGAGAGTCATGGGGACCCTATTAGGTCTCGGTGCAGTGTGGCCTAT
 CAGGACCATCGGTGTAGGGCTGCTCAGGAGTCAACACACATATACACTAAGGAGGAAGTGAAGTCCACACA
 CCAGCCCTGAGACTGGGATCTGGGTGACTCTGGGCTCTGAGGTCTTTGATGTCACAGAATTTGTGGACCT
 ACATCCAGGGGGCCTTCAAAGCTGATGCTAGCAGCTGGGGTCCCCTAGAGCCCTTCTGGGCCCTCTAT
 GCTGTTACAACAGTCCCATGTGCGTGAAGTACTGGCTCAGTACAAGATTGGGGAGCTGAATCCTGAAG
 ACAAGGTAGCCCCACCGTGGAGACCTCTGACCCTTATGCTGATGATCCTGTACGTACCCAGCCCTGAA
 GGTC AACAGCCAGCGGCCCTTAAATGCAGAGCCTCCCCCTGAGCTGCTGACAGAAAACATACACACCC
 AACCTATCTTCTCACCCGGAACCATCTGCCTGTACCTAACCTGGATCCAGACACCTATCGCTTACACG
 TAGTAGGAGCACCTGGGGTCACTCACTGTCTCTTCCCTGGATGACTTGCAACAATTTCCAGGTACGA
 GATCACAGTCACTCTGCAGTGTGCCGGAACCGACGCTCTGAGATGACTCAGGTCAAAGAAGTAAAAGGT
 CTGGAGTGGAGAACAGGAGCCATCAGCACTGCACGCTGGGCTGGGGCACGGCTCTGTGATGTGTTAGCCC
 AGGCTGGCCACCAACTCTGTGAAACTGAGGCCACGTCTGCTTTGAGGGACTGGACTCAGACCCTACTGG
 GACTGCCTATGGAGCATCCATCCCTCTGGCTCGGGCATTGACCTGAAGCTGAGGTCTGCTGGCATAT
 GAGATGAATGGGACGCTCTGCCACGTGACCACGGCTCCCTGTGCGTGTGGTGGTTCTGGAGTGGTGG
 GTGCCCGCCATGTCAAATGGCTGGGACAGTGAAGTGTGACCCAGAGGAAAGTTACAGCCACTGGCAACG
 CGGGATTACAAAGGCTTCTCTCCATCTGTGGACTGGGAGACTGTAGATTTTACTCTGCTCCATCCATT
 CAGGAACCTCCTGTCCAGTCGGCCATCACAGAGCCCCGGGATGGAGAGACTGTAGAATCAGGGGAGGTGA
 CCATCAAGGGCTATGCATGGAGTGGTGGTGGCAGGGCTGTGATCCGGGTGGATGTGTCTCTGGATGGGG
 CCTAACCTGGCAGGTGGCTAAGCTGGATGGAGAGGAACAGCGCCCCAGGAAGGCCGGGCATGGCGTCTG
 TGGCAGTTGAAAGCCCTGTGCCAGCTGGACAAAAGGAAGTGAACATTGTTTGTAAAGCTGTGGATGATG
 GTTACAATGTGCAGCCAGACACCGTGGCCCAATCTGGAACCTGCGAGGTGTTCTCAGCAATGCCTGGCA
 TCGTGTCCATGTCTATGTCTCCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220802 representing NM_001032386
 Red=Cloning site Green=Tags(s)

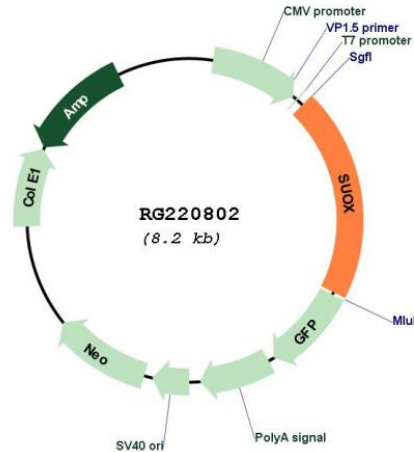
MLLLHRAVVLRLQQACRLKSIPSRICIQACSTNDSFQPQRPSLTFSGDNSSTQGWRVMGTLGLGAVLAY
 QDHCRAAQESTHIYTKKEEVSSHTSPETGIWVTLGSEVFDVTEFVDLHPGGPSKLM LAAGGPLEPFWALY
 AVHNQSHVRELLAQYKIGELNPEDKVAPTIVETSDPYADDPVRRHPALKVNSQRPFNAEPPPELLTENYITP
 NPITFFTRNHLVPVNLDPDTPYRLHVVGAPGGQSLSLDLDLHNFPRYEITVTLQCAGNRRSEMTQVKEVKG
 LEWRTGAI STARWAGARLCDVLAQAGHQLCETE AHVCFEGLDSDPTGTAYGASIP LARAMDPEAEVLLAY
 EMNGQPLPRDHGFPVRVVVPGVVGARHVKWLGRVSVQPEESYSHWQRDYKGFSPSVDWETVDFDSAPSI
 QELPVQSAITEPRDGETVESGEVTIKGYAWSGGRAVIRVDVSLDGGLTWQVAKLDGEEQRPRKAWAWRL
 WQLKAPVPAGQKELNIVCKAVDDGYNVQPDVAPIWNLRGVL SNAWHRVHVYVSP

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Plasmid Map:



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_001032386.2](#)

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

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]