

Product datasheet for **SC302253**

SOD2 (NM_001024466) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SOD2 (NM_001024466) Human Untagged Clone
Tag:	Tag Free
Symbol:	SOD2
Synonyms:	GClnc1; IPO-B; IPOB; Mn-SOD; MNSOD; MVCD6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_001024466 edited ATGTTGAGCCGGGCAGTGTGCGGCACCAGCAGGCTGGCTCCGGTTTTGGGGTATCTG GGCTCCAGGCAGAAGCACAGCCTCCCCGACCTGCCCTACGACTACGGCGCCTGGAACCT CACATCAACGCGCAGATCATGCAGCTGCACCACAGCAAGCACCACGCGCCTACGTGAAC AACCTGAACGTCACCGAGGAGAAGTACCAGGAGGCGTTGGCCAAGGGGGAGTTGCTGGAA GCCATCAAACGTGACTTTGGTTCCTTTGACAAGTTAAGGAGAAGCTGACGGCTGCATCT GTTGGTGTCCAAGGCTCAGGTTGGGTTGGCTTGGTTTCAATAAGGAACGGGGACACTTA CAAATTGCTGCTGTCCAAATCAGGATCCACTGCAAGGAACAACAGGCCTTATTCCACTG CTGGGGATTGATGTGTGGGAGCACGCTTACTACCTTCAGTATAAAAATGTCAGGCCTGAT TATCTAAAAGCTATTTGGAATGTAATCAACTGGGAGAATGTAAGTAAAGATAACATGGCT TGCAAAAAGTAA
Restriction Sites:	Please inquire
ACCN:	NM_001024466
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:	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_001124466.1.
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).



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Reconstitution Method:	<ol style="list-style-type: none">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:	<u>NM_001024466.1, NP_001019637.1</u>
RefSeq Size:	918 bp
RefSeq ORF:	552 bp
Locus ID:	6648
UniProt ID:	<u>P04179</u>
Cytogenetics:	6q25.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Huntington's disease
Gene Summary:	<p>This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. [provided by RefSeq, Apr 2016]</p> <p>Transcript Variant: This variant (3) lacks an alternate in-frame exon in the central coding region, and splices out a region of the 3' UTR, compared to variant 1. The encoded isoform (B) is shorter than isoform A. Both variants 3 and 4 encode the same isoform (B).</p>