

Product datasheet for SC302252

SOD2 (NM_001024465) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SOD2 (NM_001024465) Human Untagged Clone
Tag:	Tag Free
Symbol:	SOD2
Synonyms:	GClnc1; IPO-B; IPOB; Mn-SOD; MNSOD; MVCD6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC302252 representing NM_001024465. Blue=Insert sequence Red=Cloning site Green=Tag(s)

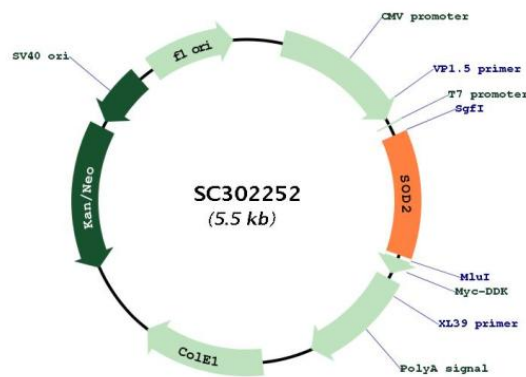
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GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTGAGCCGGGCAGTGTGCGGCACCAGCAGGCAGCTGGCTCCGGTTTTGGGGTATCTGGGCTCCAGG
CAGAAGCACAGCCTCCCCGACCTGCCCTACGACTACGGCGCCCTGGAACCTCACATCAACGCGCAGATC
ATGCAGCTGCACCACAGCAAGCACCACGCGGCCTACGTGAACAACCTGAACGTCACCGAGGAGAAGTAC
CAGGAGGCGTTGGCCAAGGGAGATGTTACAGCCAGATAGCTCTTCAGCCTGCACTGAAGTTCAATGGT
GGTGGTCATATCAATCATAGCATTTTCTGGACAAACCTCAGCCCTAACGGTGGTGGAGAACCCAAAGGG
GAGTTGCTGGAAGCCATCAAACGTGACTTTGGTTCCTTTGACAAGTTAAGGAGAAGCTGACGGCTGCA
TCTGTTGGTGTCCAAGGCTCAGGTTGGGTTGGCTTGGTTTCAATAAGGAACGGGGACACTTACAAATT
GCTGCTTGTCAAATCAGGATCCACTGCAAGGAACAACAGGCCTTATTCCACTGCTGGGGATTGATGTG
TGGGAGCACGCTTACTACCTTCAAGTATAAAAATGTGAGGCCTGATTATCTAAAAGCTATTTGGAATGTA
ATCAACTGGGAGAATGTAAGTAAAGATACATGGCTTGCAAAAAGTAA
ACGCGTACGCGGCCGCTCGAGCAGAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
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Restriction Sites: Sgfl-MluI



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Plasmid Map:



ACCN: NM_001024465

Insert Size: 669 bp

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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001024465.2](#)

RefSeq Size:	1107 bp
RefSeq ORF:	669 bp
Locus ID:	6648
UniProt ID:	P04179
Cytogenetics:	6q25.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Huntington's disease
MW:	24.8 kDa
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 (2) splices out a region of the 3' UTR, compared to variant 1. Both variants 1 and 2 encode the same isoform (A).</p>