

Specifications:

Gene:	<i>h</i> SOD2
Accession:	NP_000627.2
Insert size:	682bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

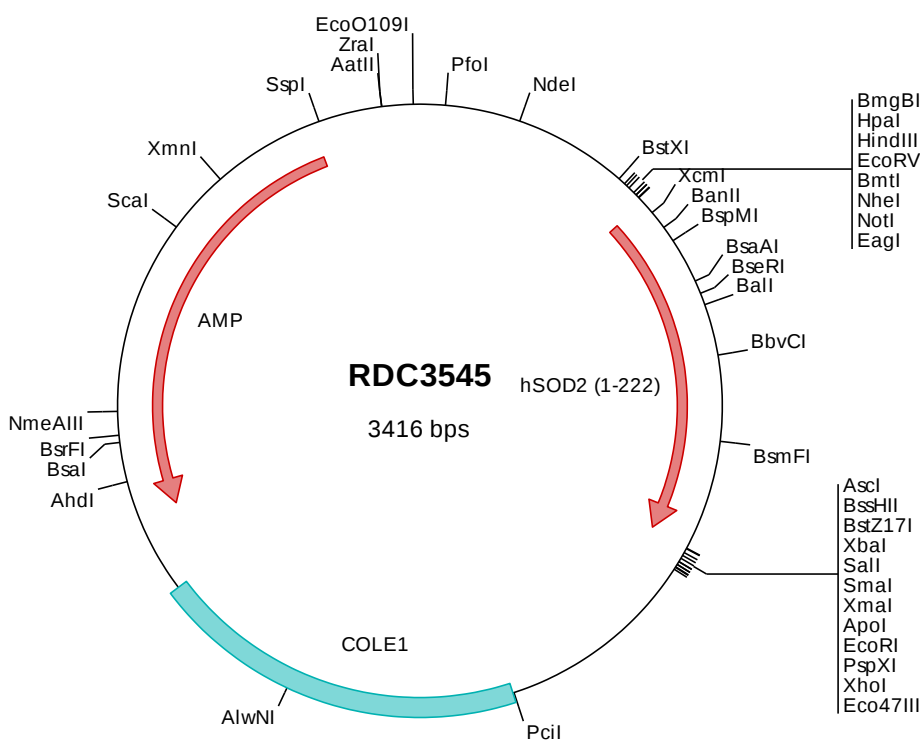
*h*SOD2/Mn-SOD cDNA Plasmid

SOD2 superoxide dismutase 2
[*Homo sapiens* (human)]

Also known as: IPOB; IPO-B;
MNSOD; MVCD6; GClnc1; Mn-SOD

Summary:

SOD2 is a member of the iron/manganese superoxide dismutase family. It forms a homotetramer and binds one manganese ion per subunit. SOD2 binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in SOD2 have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of SOD2 results in multiple transcript variants.



> RDC3545 Plasmid DNA Sequence

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1   tcgcgcgcttt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacgggtca cagcttgtct gtaagcggat gccgggagca gacaagcccc
101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggcgcgccacc atgttgagcc gggcagtggt cggcaccagc aggcagctgg ctcgggtttt
501  ggggtatctg ggctccaggc agaagcacag cctccccgac ctgcctacg actacggcgc cctggaacct cacatcaacg cgcagatcat gcagctgcac
601  cacagcaagc accacggcgc ctacgtgaac aaactgaacg tcaccgagga gaagtaccag gaggcgttgg ccaagggaga tgttacagcc cagatagctc
701  ttcagcctgc actgaagttc aatggtggtg gtcatatcaa tcctagcatt ttctggacaa acctcagccc taacggtggt ggagaaccca aaggggagtt
801  gctggaagcc atcaaacgtg acttttggtt ctttgacaag tttaaggaga agctgacggc tgcatctgtt ggtgtccaag gctcaggttg gggttggtct
901  ggtttcaata aggaacgggg acacttaca attgctgctt gtccaaatca ggatccactg caaggaacaa caggccttat tccactgctg gggattgatg
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2401 atttctgcca tccatagttg cctgactccc ctgtgtgtag ataactacga tacgggaggg cttaccatct ctgcaatgat acccgagac
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> RDC3545 Translated Insert Sequence

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101  fwnlnspngg gepkgellea ikrdfgsfdk fkekltaasv gvqsggwgl gfnkerghlq iaacpnqdp1 qgttglipl1 gidvwehayy lqyknvrpdy
201  lkaiwnvinw envterymac kk

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