

Product datasheet for **SC204961**

Superoxide Dismutase 1 (SOD1) (NM_000454) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones
Product Name: Superoxide Dismutase 1 (SOD1) (NM_000454) Human 3' UTR Clone
Vector: pMirTarget (PS100062)
Symbol: SOD1
Synonyms: ALS; ALS1; HEL-S-44; homodimer; hSod1; IPOA; SOD; STAHP
ACCN: NM_000454
Insert Size: 383 bp
Insert Sequence: >SC204961 3'UTR clone of NM_000454
The sequence shown below is from the reference sequence of NM_000454. The complete sequence of this clone may contain minor differences, such as SNPs.
Blue=Stop Codon **Red**=Cloning site

```
GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GCTTGTGGTGTAATTGGGATCGCCCAATAAACATTCCCTGGATGTAGTCTGAGGCCCTTAACTCATC
TGTTATCCTGCTAGCTGTAGAAATGTATCCTGATAAACATTAACACTGTAATCTTAAAAGTGAATTG
TGTGACTTTTTTCAGAGTTGCTTTAAAGTACCTGTAGTGAGAAACTGATTTATGATCACTTGAAGATTT
GTATAGTTTTATAAACTCAGTTAAAATGTCTGTTTCAATGACCTGTATTTGCCAGACTTAAATCACA
GATGGGTATTAACCTTGTGAGAATTTCTTTGTCATTCAAGCCTGTGAATAAAAACCTGTATGGCACTT
ATTATGAGGCTATTAAGAATCCAAATCAAATAAA
ACGCGTAAGCGGCCGCGGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCCTTCTATGAAAGG
```

Restriction Sites: SgfI-MluI

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).

Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

RefSeq: [NM_000454.5](#)



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Summary:

The protein encoded by this gene binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. In addition, this protein contains an antimicrobial peptide that displays antibacterial, antifungal, and anti-MRSA activity against *E. coli*, *E. faecalis*, *S. aureus*, *S. aureus* MRSA LPV+, *S. agalactiae*, and yeast *C. krusei*. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. [provided by RefSeq, Jul 2020]

Locus ID:

6647

MW:

14.6