

## Product datasheet for **TP750141**

### Superoxide Dismutase 1 (SOD1) (NM\_000454) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human superoxide dismutase 1, soluble (SOD1), full length, with N-terminal His tag, expressed in E. coli, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding human full-length SOD1
Tag:	N-His
Predicted MW:	15.8 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	PBS, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_000445</a>
Locus ID:	6647
UniProt ID:	<a href="#">P00441</a> , <a href="#">V9HWC9</a>
RefSeq Size:	981
Cytogenetics:	21q22.11
RefSeq ORF:	462
Synonyms:	ALS; ALS1; HEL-S-44; homodimer; hSod1; IPOA; SOD; STAHP


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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]

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Amyotrophic lateral sclerosis (ALS), Huntington's disease, Prion diseases

**Product images:**
