

## Product datasheet for TP300725M

## OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human superoxide dismutase 1, soluble (SOD1), 100 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC200725 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MATKAVCVLKGDGPVQGIINFEQKESNGPVKVWGSIKGLTEGLHGFHVHEFGDNTAGCTSAGPHFNPLSR KHGGPKDEERHVGDLGNVTADKDGVADVSIEDSVISLSGDHCIIGRTLVVHEKADDLGKGGNEESTKTGN

AGSRLACGVIGIAQ

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

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:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**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: NP 000445

Locus ID: 6647

**UniProt ID:** <u>P00441</u>, <u>V9HWC9</u>

RefSeq Size: 981





Cytogenetics: 21q22.11

RefSeq ORF: 462

Synonyms: ALS; ALS1; HEL-S-44; homodimer; hSod1; IPOA; SOD; STAHP

**Summary:** The protein encoded by this gene binds copper and zinc ions and is one of two isozymes

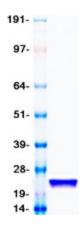
responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. In addition, 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:**



Coomassie blue staining of purified SOD1 protein (Cat# [TP300725]). The protein was produced from HEK293T cells transfected with SOD1 cDNA clone (Cat# [RC200725]) using MegaTran 2.0

(Cat# [TT210002]).