

Datasheet for ABIN934983
SOD1 Protein (AA 1-154)



[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	SOD1
Protein Characteristics:	AA 1-154
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	MATKAVCVLK GDGPVQGIIN FEQKESNGPV KVVGSIKGLT EGLHGFHVHE FGDNTAGCTS AGPHFNPLSR KHGGPKDEER HVGDLGNVTA DKDGVADVSI EDSVISLSGD HCIIGRTLTV HEKADDLGKG GNEESTKTGN AGSRLACGVI GIAQ
Characteristics:	Purified recombinant Human SOD1 protein Expression System: E.coli Bioactivity: Specific activity is > 90 units/mg, in which one unit will inhibit the rate of reduction of cytochrome c by 50 % in a coupled system, using xanthine and Xanthine oxidase at pH 7.8 at 25 °C in a 1.5 ml reaction volume. Molecular weight on SDS-PAGE will appear higher.
Purity:	> 95 % pure

Target Details

Target: SOD1

Alternative Name: SOD1 ([SOD1 Products](#))

Background: Superoxide dismutase 1 (SOD1) binds copper and zinc ions and is one of three isozymes responsible for destroying free superoxide radicals in the body. The encoded protein neutralizes supercharged oxygen molecules, which can damage cells if their levels are not controlled. Mutations in SOD1 cause a form of familial amyotrophic lateral sclerosis (ALS). Recombinant SOD1 was expressed in *E. coli* and purified by conventional chromatography techniques.

Alternative Names: SOD-1 protein, SOD protein, , Mn superoxide dismutase protein, SOD2 protein, SOD-1, SOD 1, Indophenoloxidase A protein, ALS protein, soluble ALS 1 protein, Superoxide dismutase 1 soluble protein, Superoxide dismutase 1 soluble protein, Amyotrophic lateral sclerosis 1 Amyotrophic lateral sclerosis 1 adult protein, Superoxide dismutase Cu Zn protein, Homodimer protein, SOD1, SODC protein, Cu/Zn superoxide dismutase protein, SOD1 protein, Cu-Zn superoxide dismutase protein, SOD 1 protein, IPOA protein, Superoxide dismutase cystolic protein, Cu/Zn SOD protein, SOD soluble protein, Superoxide dismutase 1 protein, ALS1 protein, SOD 1 protein

Molecular Weight: 15.9 kDa (154 AA)

Pathways: [Sensory Perception of Sound](#), [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: SOD1 protein has been used in SDS PAGE and may be suitable for use in other assays to be determined by the end user.

Assay Procedure:

1. Prepare a 1.5 mL reaction mix in a suitable container and pre-chill on ice before use: The final concentrations are 50 mM potassium phosphate, 0.0 mM ethylenediaminetetraacetic acid, 0.00 mM cytochromC 0.00 mM xanthine, 0.005 units xanthine oxidase.
2. Equilibrate to 25 °C and monitor at A550 nm until the value is constant using a spectrophotometer.
3. Add 50 µL of recombinant SOD protein in various concentrations (0.5 µg, 5 µg) in assay buffer.
4. Mix by inversion and record the increase at A550 nm for 5 minutes.

Restrictions: For Research Use only

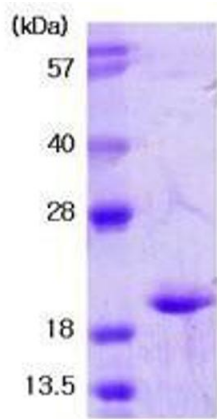
Handling

Format: Liquid

Handling

Concentration:	1 mg/mL
Buffer:	Supplied as a liquid in 20 mM Tris-HCl, pH 7.5, containing 10 % glycerol.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	RT/-20 °C
Storage Comment:	Store at 4 °C for short term storage (1/2 weeks). Aliquot and store at -20 °C or -70 °C for long term storage.

Images



15% SDS-PAGE (3ug)

SDS-PAGE

Image 1. Figure annotation denotes ug of protein loaded and % gel used.