Recombinant Mouse Sod2, His-tagged

Cat. No. Sod2-56M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse Sod2, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	E.coli
Description	Sod2 also known as superoxide dismutase [Mn], mitochondrial, is a member of the iron/manganese superoxide dismutase family. It is a mitochondrial matrix protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this protein have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer.
Form	Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT
Molecular Mass	24.6kDa (221aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSKHSLPDL PYDYGALEPH INAQIMQLHH SKHHAAYVNN LNATEEKYHE ALAKGDVTTQ VALQPALKFN GGGHINHTIF WTNLSPKGGG EPKGELLEAI KRDFGSFEKF KEKLTAVSVG VQGSGWGWLG FNKEQGRLQI AACSNQDPLQ GTTGLIPLLG IDVWEHAYYL QYKNVRPDYL KAIWNVINWE NVTERYTACK K

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Purity	>95% by SDS - PAGE
Storage	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.
Concentration	1mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	Sod2 superoxide dismutase 2, mitochondrial [Mus musculus]
Official Symbol	Sod2
Synonyms	SOD2; superoxide dismutase 2, mitochondrial; superoxide dismutase [Mn], mitochondrial; manganese SOD; manganese superoxide dismutase; MnSOD; Sod-2; MGC6144;
Gene ID	20656
mRNA Refseq	NM_013671
Protein Refseq	NP_038699
Pathway	Huntingtons disease, organism-specific biosystem; Huntingtons disease, conserved biosystem; One carbon metabolism and related pathways, organism-specific biosystem; Oxidative Stress, organism-specific biosystem; Peroxisome, organism-specific biosystem; Peroxisome, conserved biosystem; superoxide radicals degradation, organism-specific biosystem;
Function	DNA binding; identical protein binding; manganese ion binding; metal ion binding; oxidoreductase activity; oxygen binding; superoxide dismutase activity; superoxide

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	dismutase activity; superoxide dismutase activity;

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