

## 32-13445: SOD2 Mouse

**Alternative Name** : Superoxide dismutase [Mn], Superoxide Dismutase-2, mitochondrial, Sod-2.

### Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

SOD2 is part of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. SOD2 binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in SOD2 gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. SOD2 destroys radicals which are usually produced within the cells and which are toxic to biological systems.

SOD2 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 221 amino acids (25-222 a.a) and having a molecular mass of 24.6kDa. SOD2 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

<b>Amount :</b>	5 µg / 20 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	SOD2 protein solution (1mg/ml) containing Phosphate buffered saline (pH7.4), 10% glycerol and 1mM DTT.
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
<b>Amino Acid :</b>	MGSSHHHHHH SGLVPRGSH MGSKHSLPDL PYDYGALEPH INAQIMQLHH SKHHAAYVNN LNATEEKYHE ALAKGDVTTQ VALQPALKFN GGGHINHTIF WTNLSPKGGG EPKGELLEAI KRDFGSFEKF KEKLTAVSVG VQGSWGWLWLG FNKEQGRLQI AACSNQDPLQ GTTGLIPLLG IDVWEHAYYL QYKNVRPDYL KAIWNVINWE NVTERYTACK K.