

## Recombinant Human SOD2, MYC-DDK-tagged

Cat. No. SOD2-738H Lot. No. (See product label)

### SPECIFICATION

|                         |  |
|-------------------------|--|
| <b>Product Overview</b> | Recombinant Human SOD2 produced in <i>Human HEK293 cells</i> was fused with C-terminal MYC/DDK tag. MW = 22.2 kDa.   |
| <b>Species</b>          | Human  |
| <b>Source</b>           | HEK293   |
| <b>Description</b>      | This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial 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 gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. |
| <b>Sequences</b>        | <p>           MLSRAVC GTSRQLA PVLGYLG SRQKHSL PDLPYDY GALEPHI NAQIMQL<br/>           HHSKHHA AYVNNLN VTEEKYQ EALAKGD VTAQIAL QPALKFN GGGHINH<br/>           SIFWTNL SPNGGGE PKGELLE AIKRDFG SFDKFKE KLTAASV GVQGSW<br/>           GWLGFNK ERGHLQI AACPNQD PLQGTTG LIPLGI DVWEHAY YLQYKNV<br/>           RPDYLKA IWNVINW ENVTERY MACKKTR TRPLEQK LISEED LAANDIL<br/>           DYKDDDDKV         </p>   |
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining.   |
| <b>Form</b>             | 10% glycerol, 100 mM glycine, 25 mM Tris-HCl, pH 7.3.  |

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|----------------------------|---|
| <b>Concentration</b>       | > 50 ug/ml as determined by BCA.  |
| <b>Endotoxin</b>           | < 0.1 EU per 1 µg of the protein by the LAL.  |
| <b>Storage</b>             | Store at -80°C. Avoid repeated freeze-thaw cycles. Stable for 3 months from receipt of products under proper storage and handling conditions.   |
| <b>GENE INFORMATION</b>    |   |
| <b>Gene Name</b>           | SOD2 superoxide dismutase 2, mitochondrial [ Homo sapiens ]   |
| <b>Synonyms</b>            | SOD2; superoxide dismutase 2, mitochondrial; IPO-B; MNSOD; MVCD6; Mn-SOD; indophenoloxidase B; Mn superoxide dismutase; manganosuperoxide dismutase; manganese-containing superoxide dismutase; EC 1.15.1.1; Superoxide dismutase [Mn], mitochondrial; OTTHUMP00000017530; OTTHUMP00000017531; manganese superoxide dismutase |
| <b>Gene ID</b>             | 6648  |
| <b>mRNA Refseq</b>         | NM_000636   |
| <b>Protein Refseq</b>      | NP_000627   |
| <b>MIM</b>                 | 147460  |
| <b>UniProt ID</b>          | P04179  |
| <b>Chromosome Location</b> | 6q25  |
| <b>Pathway</b>             | Huntington"s disease  |

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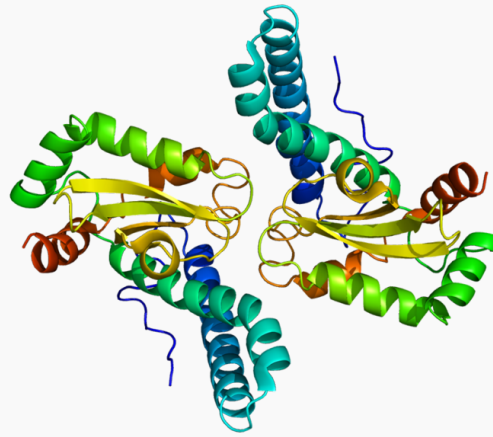
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**Function**

manganese ion binding; metal ion binding; oxidoreductase activity; oxygen binding; protein binding; superoxide dismutase activity

PDB rendering based  
on 1ap5.



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