

## SOD2 protein

<b>Catalog No :</b>	YD0095
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;SDS-PAGE
<b>Gene Name :</b>	SOD2
<b>Protein Name :</b>	SOD2 protein
<b>Sequence :</b>	Amino acid: 8-78, with his-MBP tag.
<b>Human Gene Id :</b>	6648
<b>Human Swiss Prot No :</b>	P04179
<b>Mouse Swiss Prot No :</b>	P09671
<b>Formulation :</b>	Liquid in PBS
<b>Concentration :</b>	SDS-PAGE >90%
<b>Storage Stability :</b>	-20 °C/6 month,-80 °C for long storage
<b>Background :</b>	<p>catalytic activity:2 superoxide + 2 H(+) = O(2) + H(2)O(2).,cofactor:Binds 1 manganese ion per subunit.,disease:Genetic variation in SOD2 is associated with susceptibility to diabetic nephropathy [MIM:612634]; also called susceptibility to microvascular complications of diabetes type 6 (MVCD6). Diabetic nephropathy is a kidney disease and resultant kidney function impairment due to the long standing effects of diabetes on the microvasculature (glomerulus) of the kidney. Features include increased urine protein and declining kidney function.,function:Destroys radicals which are normally produced within the cells and which are toxic to biological systems.,online information:Superoxide dismutase entry,online information:The Singapore human mutation and polymorphism database,PTM:Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.,similarity:Belongs to the iron/manganese superoxide dismutase family.,subunit:Homotetramer.,</p>
<b>Function :</b>	response to reactive oxygen species, response to superoxide, response to

oxygen radical, age-dependent response to oxidative stress, age-dependent response to reactive oxygen species, response to hypoxia, release of cytochrome c from mitochondria, liver development, neurological system process involved in regulation of systemic arterial blood pressure, immune system development, circulatory system process, vascular process in circulatory system, detection of oxygen, regulation of systemic arterial blood pressure mediated by a chemical signal, regulation of systemic arterial blood pressure by acetylcholine, vasodilation by acetylcholine involved in regulation of systemic arterial blood pressure, regulation of systemic arterial blood pressure by neurotransmitter, regulation of systemic arterial blood pressure, negative regulation of systemic arterial blood pressure, generation of precursor

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**Subcellular Location :**

Mitochondrion matrix.

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## Products Images

