

SOD2 rabbit-FC recombinant protein

Catalog No :	YD3117
Reactivity :	Human;
Purity :	>90% as determined by SDS-PAGE
Gene Name :	SOD2
Protein Name :	Superoxide dismutase [Mn] mitochondrial
Sequence :	Amino acid:25-140,with rabbit FC tag.
Human Gene Id :	6648
Human Swiss Prot No :	P04179
Formulation :	Phosphate-buffered solution
Source :	Mammalian cells
Storage Stability :	-15°C to -25°C/1 year(Avoid freeze / thaw cycles)
Background :	<p>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. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. [provided by RefSeq, Apr 2016],</p>
Function :	<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</p>

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:Belo

Subcellular Location :

Mitochondrion matrix.

Expression :

Brain,Colon,Heart,Liver,Lung,Mammary carcinoma,Tongue,

Products Images