



# SOD-2 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02883
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	SOD2
<b>Protein Name</b>	Superoxide dismutase [Mn] mitochondrial
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from the Internal region of human SOD2. AA range:91-140
<b>Specificity</b>	SOD-2 Polyclonal Antibody detects endogenous levels of SOD-2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IHC-p: 100-300.WB: 1/500 - 1/2000. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	SOD2; Superoxide dismutase [Mn], mitochondrial
<b>Observed Band</b>	24kD
<b>Cell Pathway</b>	Mitochondrion matrix.
<b>Tissue Specificity</b>	Brain,Colon,Heart,Liver,Lung,Mammary carcinoma,Tongue,
<b>Function</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:Belo</p>
<b>Background</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. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. [provided by RefSeq, Apr 2016],

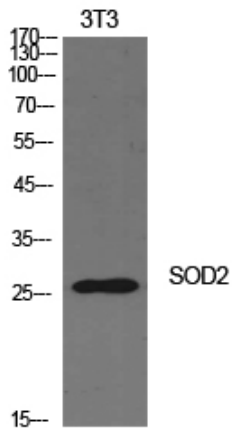
**matters needing attention**

Avoid repeated freezing and thawing!

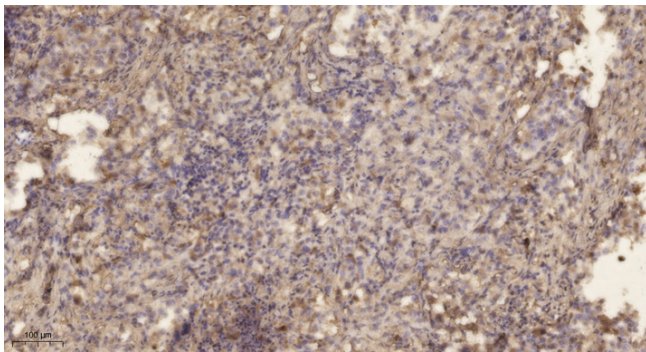
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of NIH-3T3 cells using SOD-2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human lung cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).