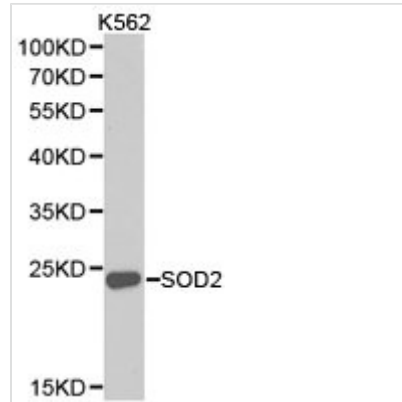




SOD2 Antibody

Product Code	CSB-PA022398KA01HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P04179
Immunogen	Recombinant protein of Human SOD2
Raised In	Rabbit
Species Reactivity	Human,Mouse,Rat
Tested Applications	ELISA,WB,IHC;WB:1:500-1:2000,IHC:1:50-1:200
Relevance	<p>The superoxide dismutase family is composed of three metalloenzymes (SOD-1, SOD-2 and SOD-3) that catalyze the oxido-reduction of reactive oxygen species (ROS) such as superoxide anion. The SOD-2 precursor is a 222 amino acid protein that is encoded by nuclear chromatin, synthesized in the cytosol and imported posttranslationally into the mitochondrial matrix. Unlike SOD-1, which is a homodimeric cytosolic Cu-Zn enzyme, SOD-2 is a homotetrameric manganese enzyme (also known as MnSOD) that functions in the mitochondrion. ROS are implicated in a wide range of degenerative processes, including Alzheimer's disease, Parkinson's disease and ischemic heart disease. Homozygous mutant mice, which lack SOD-2, exhibit dilated cardiomyopathy, accumulation of lipid in liver and skeletal muscle, metabolic acidosis, oxidative DNA damage and respiratory chain deficiencies in heart and skeletal muscle. Polymorphisms in the SOD-2 gene have also been implicated in nonfamilial, idiopathic, dilated cardiomyopathy in humans.</p>
Storage Buffer	Store at -20°C or -80°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Purification Method	Affinity purification
Isotype	IgG
Alias	SOD2;IPOB;MNSOD;MVCD6
Product Type	Rabbit Anti Human PolyClonal Antibody
Immunogen Species	Homo sapiens (Human)
Intended Use	For research use only. Not for human, diagnostic or therapeutic use.
Target Names	SOD2
Image	



Western blot analysis of extracts of K562 cell lines, using SOD2 antibody.

Target Details

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.