



Rabbit Anti-SOD2 antibody

SL1080R

Product Name:	SOD2
Chinese Name:	超氧化物歧化酶2抗体
Alias:	IPO B; Manganese SOD; Superoxide Dismutase 2; Manganese superoxide dismutase; Mn SOD; MNSOD; SOD 2; SOD-2; Superoxide dismutase [Mn] mitochondrial; Superoxide dismutase [Mn] mitochondrial precursor; Superoxide dismutase 2 mitochondrial; SODM_HUMAN.
文献引用 	<p>Specific References(4) SL1080R has been referenced in 4 publications.</p> <p>[IF=2.21]Khan, Md Asaduzzaman, et al. "Regulatory effects of resveratrol on antioxidant enzymes: A mechanism of growth inhibition and apoptosis induction in cancer cells." <i>Molecules and cells</i> (2013): 1-7.WB;Human. PubMed:23456297</p> <p>[IF=4.20]Yuan, Qing, et al. "Docetaxel-loaded solid lipid nanoparticles suppress breast cancer cells growth with reduced myelosuppression toxicity." <i>International Journal of Nanomedicine</i> 9 (2014): 4829.WB;Mouse. PubMed:25378924</p> <p>[IF=3.85]Wang, Yandi, et al. "Regulation of steroid hormones and energy status with cysteamine and its effect on spermatogenesis." <i>Toxicology and Applied Pharmacology</i> (2016).IHC-P;Sheep. PubMed:27815134</p> <p>[IF=5.23]Zhao, Yong, et al. "Hydrogen Sulfide and/or Ammonia Reduces Spermatozoa Motility through AMPK/AKT Related Pathways." <i>Scientific Reports</i> 6 (2016): 37884.WB;Pig. PubMed:27883089</p>

Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SOD2:41-78/222
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<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. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]</p> <p>Function: Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.</p> <p>Subunit: Homotetramer.</p> <p>Subcellular Location: Mitochondrion matrix.</p> <p>Post-translational modifications: Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity. Acetylation at Lys-122 decreases enzymatic activity. Deacetylated by SIRT3 upon exposure to ionizing radiations or after long fasting.</p> <p>DISEASE: Microvascular complications of diabetes 6 (MVCD6) [MIM:612634]: Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes</p>

mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Similarity:

Belongs to the iron/manganese superoxide dismutase family.

SWISS:

P04179

Gene ID:

6648

Database links:

[Entrez Gene: 374042](#)Chicken

[Entrez Gene: 281496](#)Cow

[Entrez Gene: 476258](#)Dog

[Entrez Gene: 6648](#)Human

[Entrez Gene: 20656](#)Mouse

[Entrez Gene: 100154319](#)Pig

[Entrez Gene: 24787](#)Rat

[Omim: 147460](#)Human

[SwissProt: P41976](#)Cow

[SwissProt: P04179](#)Human

[SwissProt: P09671](#)Mouse

[SwissProt: P41982](#)Rabbit

[SwissProt: P07895](#)Rat

[Unigene: 487046](#)Human

[Unigene: 290876](#)Mouse

[Unigene: 10488](#)Rat

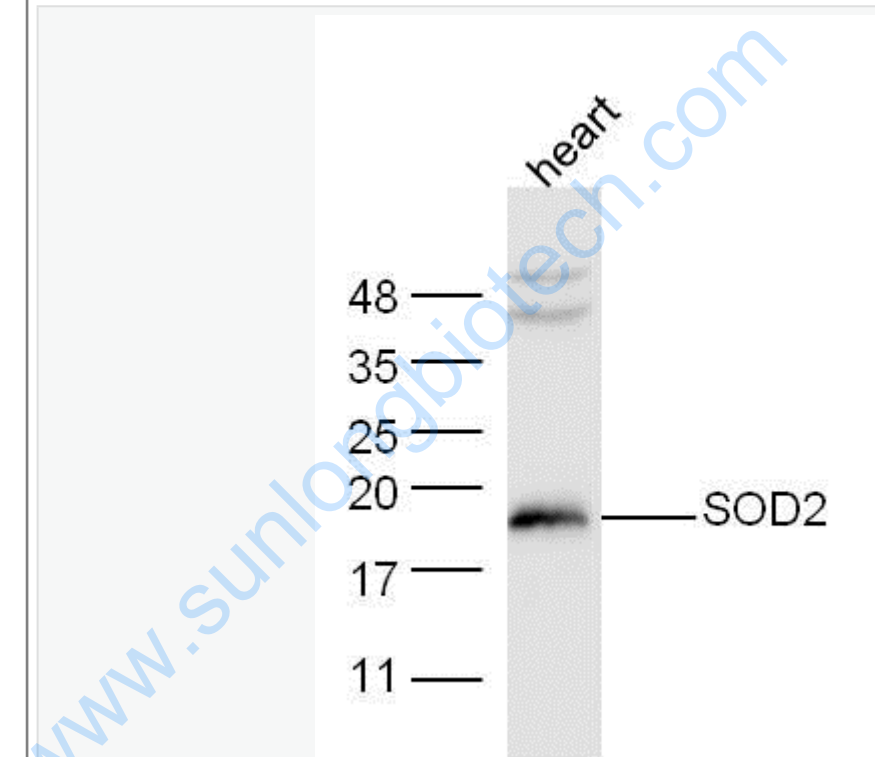
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SOD2是清除Mitochondrion氧自由基的最主要的酶类, SOD2参与促进Cell differentiation和Tumour发生。SOD2的表达缺乏与血管病变、新生儿致死、神经退行性病变有关联。SOD2过度表达与抵御细胞氧化损伤有关。

超氧化物歧化酶又称(Superoxide dismutase, 简称SOD)是参与机体抗氧化(ROS, 反应性氧离子reactive oxygen species)防御机制和抵御细胞氧化损伤最重要的酶类之一, 广泛存在于需氧生物、耐氧生物及某些厌氧微生物中, 目前已知的SOD主要分为三类, 即胞质中Cu/Zn-SOD(即SOD1)、Mitochondrion中的Mn-SOD(即SOD2)和ec-SOD(即SOD3)。

Picture:



Sample: Heart(Mouse) lysate at 30ug; Primary: Anti-SOD2 (SL1080R) at 1:300 dilution; Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G-HRP) at 1:5000 dilution; Predicted band size :22kD Observed band size : 19kD