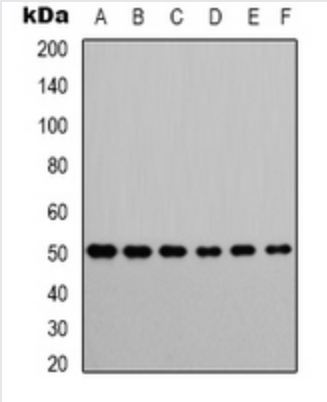
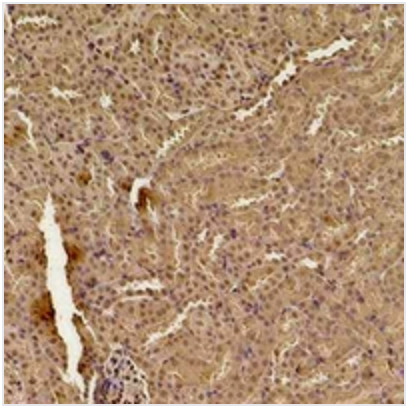
SOD1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	SOD1, Polyclonal Antibody
Full Product Name	Anti-SOD1 Antibody
Product Gene Name	anti-SOD1 antibody
Product Synonym Names	Superoxide dismutase [Cu-Zn]; Superoxide dismutase 1; hSod1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid in 0.42% Potassium Phosphate, 0.87% Sodium Chloride, pH 7.3, 30% Glycerol, and 0.01% Sodium Azide.
Purity/Purification	The antibody was purified by affinity chromatography.
Specificity	Recognizes endogenous levels of SOD1 protein.
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C for one year. Avoid freeze/thaw cycles.
Molecular Weight	15,936 Da
OMIM	105400
3D Structure	ModBase 3D Structure for P00441
Immunogen	Recombinant protein corresponding to human SOD1.
Applications Tested/Suitable for anti-SOD1 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-SOD1 antibody	Western Blot: (1/2000 - 1/5000); Immunohistochemistry: (1/200 - 1/500)
Related Product Information for anti-SOD1 antibody	MBS8242677 is an antibody targeting SOD1. Reactive in Human, Mouse, Rat. Host: Rabbit. Rabbit polyclonal to SOD1
Other Notes	Small volumes of anti-SOD1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-SOD1 antibody
Western blot analysis of SOD1 expression in Hela (A), MCF7 (B), mouse brain (C), rat brain (D) whole cell lysates.



Immunohistochemistry (IHC) of anti-SOD1 antibody
Immunohistochemical analysis of SOD1 staining in mouse kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SOD1. It may not necessarily be applicable to this product.

NCBI GI #	134611
NCBI GeneID	6647
NCBI Accession #	P00441.2
UniProt Primary Accession #	P00441
UniProt Secondary Accession #	Q16669; Q16711; Q16838; Q16839; Q16840; Q6NR85; A6NHJ0; D3DSE4
UniProt Related Accession #	P00441
NCBI Official Full Name	Superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 1, soluble
NCBI Official Symbol	SOD1
NCBI Official Synonym Symbols	ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer
UniProt Protein Name	Superoxide dismutase [Cu-Zn]
UniProt Synonym Protein Names	Superoxide dismutase 1; hSod1
Protein Family	Superoxide dismutase
UniProt Gene Name	SOD1
UniProt Synonym Gene Names	hSod1
UniProt Entry Name	SODC_HUMAN
NCBI Protein Information	superoxide dismutase [Cu-Zn]
NCBI Summary for SOD1	The protein encoded by this gene binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. [provided by RefSeq, Jul 2008]

UniProt Comments for SOD1	SOD1: Destroys radicals which are normally produced within the cells and which are toxic to biological systems. Homodimer; non-disulfide linked. Homodimerization may take place via the ditryptophan cross-link at Trp-33. The pathogenic variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 interact with RNF19A, whereas wild-type protein does not. The pathogenic variants ALS1 Arg-86 and Ala-94 interact with MARCH5, whereas wild-type protein does not. Belongs to the Cu-Zn superoxide dismutase family. Protein type: Nuclear receptor co-regulator; Apoptosis; Mitochondrial; EC 1.15.1.1; Oxidoreductase Chromosomal Location of Human Ortholog: 21q22.11 Cellular Component: cell soma; cytoplasm; cytoplasmic vesicle; cytosol; dendrite cytoplasm; extracellular matrix; extracellular region; extracellular space; lysosome; mitochondrial intermembrane space; mitochondrial matrix; mitochondrion; myelin sheath; nucleoplasm; nucleus; peroxisome; plasma membrane; protein complex Molecular Function: chaperone binding; copper ion binding; identical protein binding; protein binding; protein homodimerization activity; protein phosphatase 2B binding; Rac GTPase binding; superoxide dismutase activity; zinc ion binding Biological Process: activation of MAPK activity; anterograde axon cargo transport; auditory receptor cell stereocilium organization and biogenesis; blood coagulation; cell aging; cellular iron ion homeostasis; embryo implantation; glutathione metabolic process; heart contraction; hydrogen peroxide biosynthetic process; locomotory behavior; muscle maintenance; myelin maintenance in the peripheral nervous system; myeloid cell homeostasis; negative regulation of cholesterol biosynthetic process; negative regulation of neuron apoptosis; neurofilament cytoskeleton organization and biogenesis; ovarian follicle development; placenta development; platelet activation; platelet degranulation; positive regulation of apoptosis; positive regulation of catalytic activity; positive regulation of cytokine production; positive regulation of superoxide release; regulation of blood pressure; regulation of GTPase activity; regulation of mitochondrial membrane potential; regulation of multicellular organism growth; regulation of organ growth; regulation of protein kinase activity; regulation of T cell differentiation in the thymus; relaxation of vascular smooth muscle; removal of superoxide radicals; response to amphetamine; response to antibiotic; response to axon injury; response to copper ion; response to drug; response to ethanol; response to heat; response to hydrogen peroxide; response to nutrient levels; response to organic substance; response to reactive oxygen species; response to superoxide; retinal homeostasis; retrograde axon cargo transport; sensory perception of sound; spermatogenesis; superoxide metabolic process; superoxide release; thymus development; transmission of nerve impulse Disease: Amyotrophic Lateral Sclerosis 1
Research Articles on SOD1	**1.** Depletion of superoxide dismutases promotes muscular and neuronal ROS accumulation which may have a significant effect on age-dependent impairment of the Drosophila adults.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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