

PRODUCT DATA SHEET

Bioworld Technology,Inc.

SOD2 polyclonal antibody

Catalog: BS91269 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

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.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

21 kDa

Swiss-Prot:

P04179(Human) P09671(Mouse) P07895(Rat)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:1,000-1:2,000 IHC:1:50-1:200

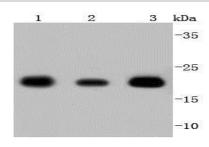
Storage&Stability:

Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C or -80 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

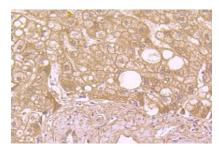
Specificity:

SOD2 polyclonal antibody detects endogenous levels of SOD2 protein.

DATA:



Western blot analysis of SOD2 on different lysates using anti-SOD2 antibody at 1/1,000 dilution. Positive control: Lane 1: Mouse brain Lane 2: SH-SY-5Y Lane 3: Human heart



Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-SOD2 antibody. Counter stained with hematoxylin.

Note:

For research use only, not for use in diagnostic procedure.

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