

**[ Primary Antibody ]**

**BioSS**  
ANTIBODIES

www.bioss.com.cn

sales@bioass.com.cn

techsupport@bioss.com.cn

400-901-9800

## — DATASHEET

**Host:** Rabbit

**Isotype:** IgG

**Clonality:** Polyclonal

**GeneID:** 6648

**SWISS:** P04179

**Target:** SOD2

**Immunogen:** KLH conjugated synthetic peptide derived from human SOD2: 41-78/222.

**Purification:** affinity purified by Protein A

**Concentration:** 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** 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]

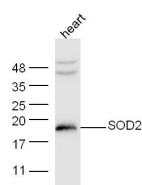
**Applications: WB (1:500-2000)**

**Reactivity:** Human, Mouse  
(predicted: Rat, Rabbit, Pig,  
Sheep, Cow, Dog, Horse)

**Predicted MW.:** 22 kDa

**Subcellular Location:** Cytoplasm

— VALIDATION IMAGES



Sample: Heart(Mouse) lysate at 30ug; Primary:  
Anti-SOD2 (bs-1080R) 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

## — SELECTED CITATIONS

- **[IF=6.081]** Naoki Yoshida. et al. Relationship between Cognitive Dysfunction and Age-Related Variability in Oxidative Markers in Isolated Mitochondria of Alzheimer's Disease Transgenic Mouse Brains. *Biomedicines*. 2022 Feb;10(2):281 WB ;Mouse. 10.3390/biomedicines10020281
- **[IF=6.025]** Xuliang Zhang. et al. PINK1/Parkin-mediated mitophagy mitigates T-2 toxin-induced nephrotoxicity. *FOOD CHEM TOXICOL*. 2022 Jun;164:113078 WB ;Mouse. 35489469
- **[IF=6.208]** Qiyang Yao. et al. Oxidative Stress as a Contributor to Insulin Resistance in the Skeletal Muscles of Mice with Polycystic Ovary Syndrome. *INT J MOL SCI*. 2022 Jan;23(19):11384 WB ;Mouse. 36232686
- **[IF=6.1]** Yun, Yang, et al. "Sulfate Aerosols Promote Lung Cancer Metastasis by Epigenetically Regulating the Epithelial-to-Mesenchymal Transition (EMT)." *Environmental Science & Technology* (2017). WB ;="Human". 28901751

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

- **[IF=6.064]** Mengni Bao. et al. N-Acetylcysteine, an ROS Inhibitor, Alleviates the Pathophysiology of Hyperthyroidism-Induced Cardiomyopathy via the ROS/Ca<sup>2+</sup> Pathway. BIOMOLECULES. 2022 Sep;12(9):1195 WB ;Mouse,Rat. 10.3390/biom12091195