bs-1079R

[Primary Antibody]

SOD1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 6647 **SWISS:** P00441

Target: SOD1

Immunogen: KLH conjugated synthetic peptide derived from human SOD1: 101-154/154.

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: 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]

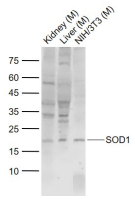
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/test)
ICC/IF (1:100)

Reactivity: Human, Mouse, Rat (predicted: Pig, Cow, Horse)

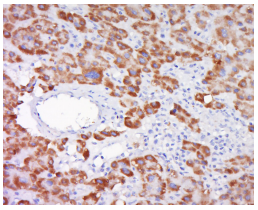
Predicted MW.: 17 kDa

Subcellular Location: Cytoplasm ,Nucleus

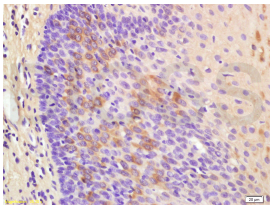
VALIDATION IMAGES



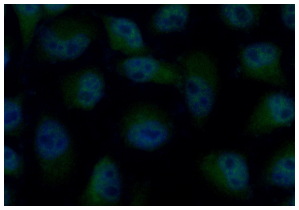
Sample: Lane 1: Kidney (Mouse) Lysate at 40 ug Lane 2: Liver (Mouse) Lysate at 40 ug Lane 3: NIH/3T3 (Mouse) Cell Lysate at 30 ug Primary: Anti-SOD1 (bs-1079R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17 kD Observed band size: 19 kD



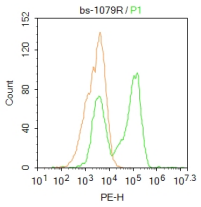
Tissue/cell: human liver cancer; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-SOD1 Polyclonal Antibody, Unconjugated(bs-1079R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human oral squamous cell carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-SOD1/SOD Polyclonal Antibody, Unconjugated(bs-1079R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Hela cell; 4% Paraformaldehyde-fixed; Ice-cold methanol at -20°C for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (SOD1) polyclonal Antibody, Unconjugated (bs-1079R) 1:100, 90



Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-SOD1 antibody (bs-1079R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 1µg

minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

/test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=14.404]** Wu, Jianjun. et al. ROS-responsive PPGF nanofiber membrane as a drug delivery system for long-term drug release in attenuation of osteoarthritis. NPJ REGEN MED. 2022 Nov;7(1):1-15 IF ;Rat. 36323709
- **[IF=8.2]** Hailin Wang. et al. Ergothioneine regulates the paracrine of dermal papilla cells through SIRT1/Nrf2 pathway to antagonize oxidative stress and natural hair follicle aging. FREE RADICAL BIO MED. 2025 May;: IF ;Human. 40449809
- **[IF=6.064]** Mengni Bao. et al. N-Acetylcysteine, an ROS Inhibitor, Alleviates the Pathophysiology of Hyperthyroidism-Induced Cardiomyopathy via the ROS/Ca2+ Pathway. BIOMOLECULES. 2022 Sep;12(9):1195 WB ;Mouse,Rat. 10.3390/biom12091195
- **[IF=6.1]** Qingyu Ding. et al. N-acetylcysteine alleviates oxidative stress and apoptosis and prevents skeletal muscle atrophy in type 1 diabetes mellitus through the NRF2/HO-1 pathway. LIFE SCI. 2023 Sep;329:121975 WB ;Dog. 37495077
- **[IF=4.622]** Shun Zhou. et al. In vitro immunotoxicity and possible mechanisms of 2,2′,4,4′-tetrabromodiphenyl ether (BDE-47) on Ruditapes philippinarum hemocytes. FISH SHELLFISH IMMUN. 2022 Aug;127:386 WB ;Ruditapes philippinarum. 35777709