Data Sheet (Cat.No.TMAB-13025)

TargetMol

Anti-SOD1 Polyclonal Antibody 2

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse (predicted:Rat,Pig,Cow,Horse)
Molecular Weight:	Theoretical: 17 kDa. Actual: 19 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Tissue/cell: human oral squamous cell carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01 M, pH 6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-SOD1/SOD Polyclonal Antibody, Unconjugated (TMAB-13025) 1: 200, overnight at 4°C, followed by conjugation to the secondary antibody and DAB staining 2. Tissue/cell: human liver cancer; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01 M, pH 6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-SOD1 Polyclonal Antibody, Unconjugated (TMAB-13025) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody and DAB staining 3. Sample: Lane 1: Kidney (Mouse) Lysate at 40 µg Lane 2: Liver (Mouse) Lysate at 40 µg Lane 3: NIH/3T3 (Mouse) Cell Lysate at 30 µg Primary: Anti-SOD1 (TMAB-13025) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17 kD Observed band size: 19 kD 4. Hela cell; 4% Paraformaldehyde-fixed; Ice-cold methanol at -20℃ for 20 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Antibody incubation with (SOD1) polyclonal Antibody, Unconjugated (TMAB-13025) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue) was used to stain the cell nuclei. 5. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-SOD1 antibody (TMAB-13025) Dilution: 1 µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-PE Dilution: 1 µg /test. Protocol The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. 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.

Application:	WB,IHC-P,IHC-Fr,ICC/IF,IF,FCM
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; ICC/IF: 1:100-500; IF: 1:100-500; FCM: 1μg/Test

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human SOD1
Antigen Species:	Human
Gene ID:	6647
Uniprot ID:	P00441

Research 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]

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