SOD1 Rabbit pAb

Catalog No.: A0274 37 Publications



Basic Information

Observed MW

16-18kDa

Calculated MW

16kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,IP,ELISA

Cross-Reactivity

Human, Mouse, Rat

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. In addition, this protein contains an antimicrobial peptide that displays antibacterial, antifungal, and anti-MRSA activity against E. coli, E. faecalis, S. aureus, S. aureus MRSA LPV+, S. agalactiae, and yeast C. krusei. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

IP 0.5μg-4μg antibody for 200μg-400μg extracts

of whole cells

ELISA Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

www.abclonal.com

Immunogen Information

Gene ID	Swiss Prot
6647	P00441

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 2-154 of human SOD1 (NP_000445.1).

Synonyms

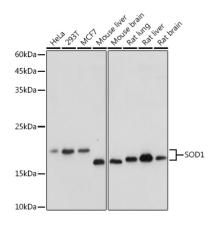
ALS; SOD; ALS1; IPOA; STAHP; hSod1; HEL-S-44; homodimer; SOD1

Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.



Western blot analysis of various lysates using SOD1 Rabbit pAb (A0274) at 1:1000

dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

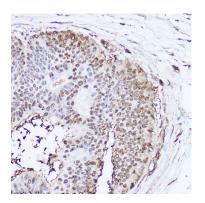
dilution.

Lysates/proteins: 25µg per lane.

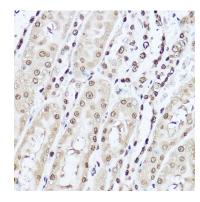
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

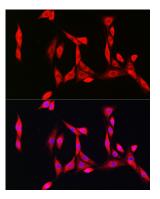
Exposure time: 1s.



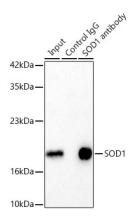
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using SOD1 Rabbit pAb (A0274) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat kidney using SOD1 Rabbit pAb (A0274) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of NIH/3T3 cells using SOD1 Rabbit pAb (A0274) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunoprecipitation of SOD1 in 300 μg extracts from MCF7 cells using 3 μg SOD1 Rabbit pAb (A0274). Western blot analysis was performed using SOD1 Rabbit pAb (A0274) at 1:1000 dilution.