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[KD Validated] SOD1 Rabbit pAb

Catalog No.: A0274SP **41 Publications**

Basic Information

Observed MW
16-18 kDa

Calculated MW
16 kDa

Category
Primary 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	1:3000 - 1:10000
IP	0.5 μg - 4 μg antibody for 200 μg - 400 μg extracts of whole cells
IF/ICC	1:100 - 1:200
IHC-P	1:300 - 1:1200
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.For high-ratio antibody dilutions (≥1:10000)a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
6647

Swiss Prot
P00441

Immunogen
This information is considered to be commercially sensitive.

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

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide. May contain 0.05% BSA as specified on the Certificate of Analysis.

Contact

400-999-6126

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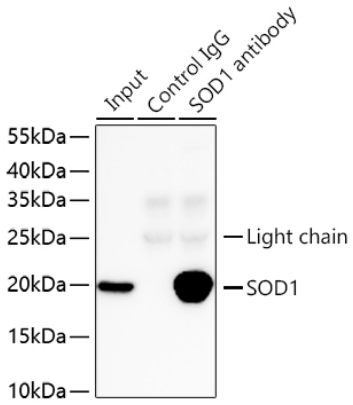
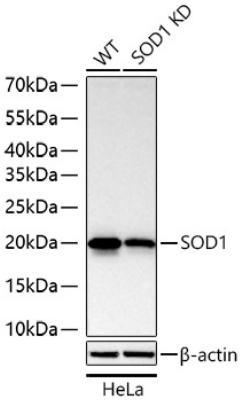
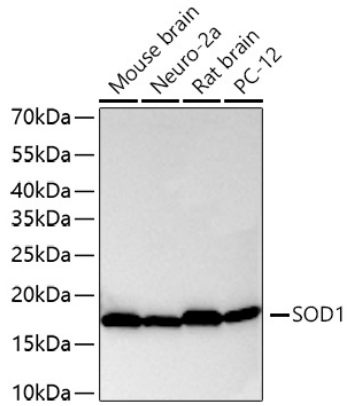
Validation Data



Immunoprecipitation of SOD1 from 300 µg extracts of MCF7 cells was performed using 2 µg of [KD Validated] SOD1 Rabbit pAb (A0274SP). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:3000.

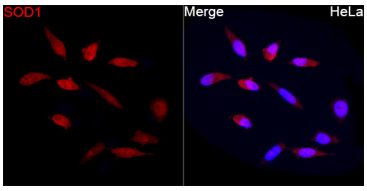


Western blot analysis of lysates from wild type (WT) and SOD1 knockdown (KD) HeLa cells using [KD Validated] SOD1 Rabbit pAb (A0274SP) at 1:3000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20 s.

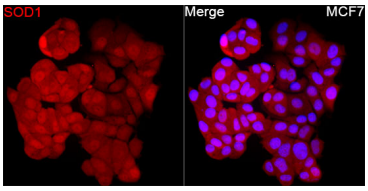


Western blot analysis of various lysates using [KD Validated] SOD1 Rabbit pAb (A0274SP) at 1:3000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20 s.

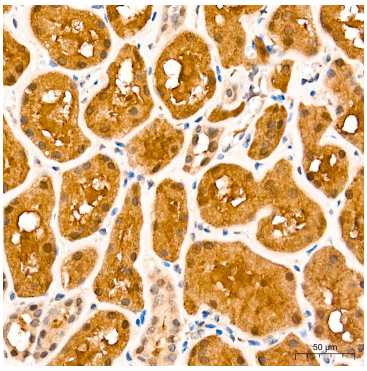
Validation Data



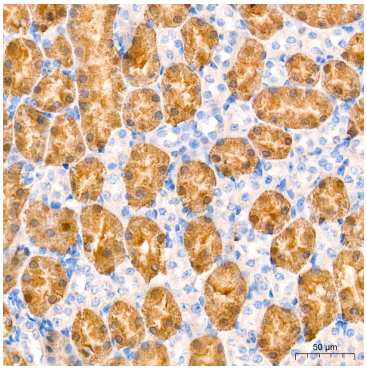
Immunofluorescence analysis of HeLa cells using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:150 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



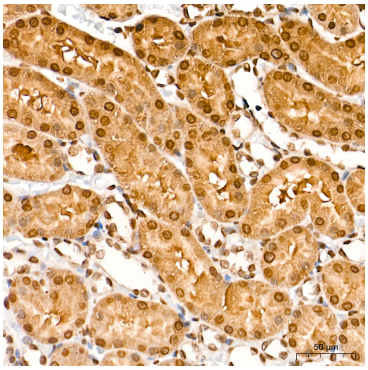
Immunofluorescence analysis of MCF7 cells using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:150 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:1200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney tissue using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:1200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat kidney tissue using [KD Validated] SOD1 Rabbit pAb (A0274SP) at a dilution of 1:1200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.