

**[KD Validated] SOD1 Rabbit PolymAb®****Catalog No.: A27899PM****Basic Information****Observed MW**

20kDa

**Calculated MW**

16kDa

**Category**

Primary antibody

**Applications**

WB, IP, IF/ICC, IHC-P, 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-occurring 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** 1:5000 - 1:20000**IP** 0.5µg-4µg antibody for  
200µg-400µg extracts of  
whole cells**IF/ICC** 1:200 - 1:800**IHC-P** 1:10000 - 1:40000**ELISA** Recommended starting  
concentration is 1 µg/mL.  
Please optimize the  
concentration based on  
your specific assay  
requirements.**Immunogen Information****Gene ID**

6647

**Swiss Prot**

P00441

**Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

**Synonyms**

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

**Product Information****Source**

Rabbit

**Isotype**

IgG

**Purification**

Affinity purification

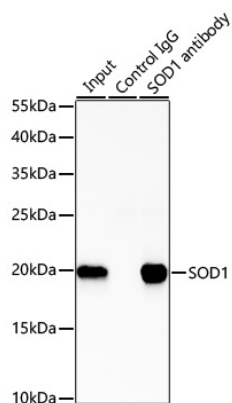
**Storage**

Store at -20°C. Avoid freeze / thaw cycles.

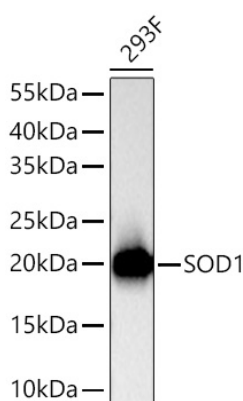
Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

**Contact** | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

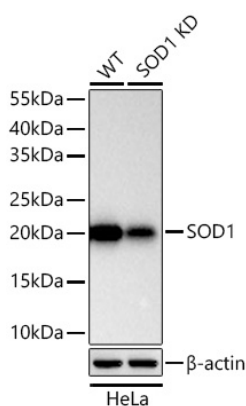
## Validation Data



Immunoprecipitation of SOD1 from 300 µg extracts of 293FT cells was performed using 2 µg of [KD Validated] SOD1 Rabbit PolymAb® (A27899PM). Rabbit IgG isotype control (AC0005) was used to precipitate the Control IgG sample. IP samples were eluted with 1X reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at a dilution of 1:5000.

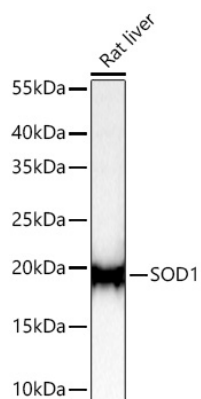


Western blot analysis of lysates from 293F cells using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at 1:19000 dilution incubated overnight at 4°C.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 1s.

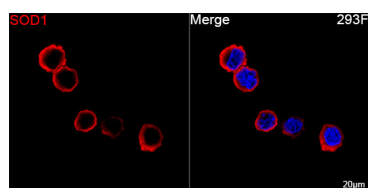


Western blot analysis of lysates from wild type (WT) and SOD1 knockdown (KD) HeLa cells using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at 1:19000 dilution incubated overnight at 4°C.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 1s.

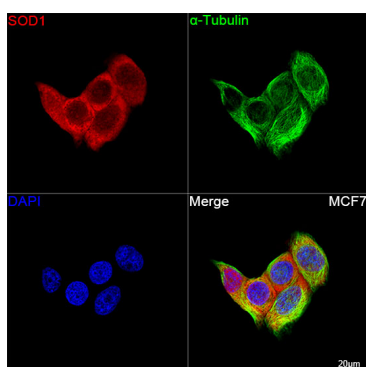
## Validation Data



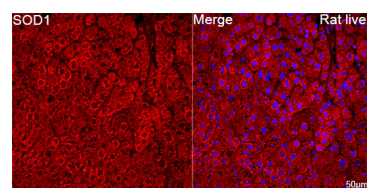
Western blot analysis of lysates from Rat liver using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at 1:5000 dilution incubated overnight at 4°C.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 20s.



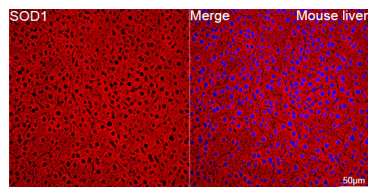
Confocal imaging of 293F cells using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



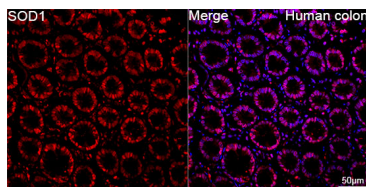
Confocal imaging of MCF7 cells using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



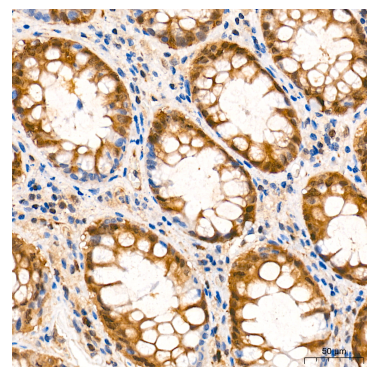
Confocal imaging of paraffin-embedded Rat liver tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Confocal imaging of paraffin-embedded Mouse liver tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



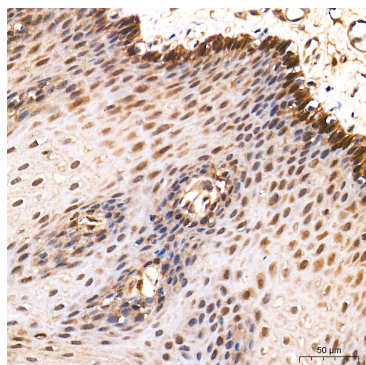
Confocal imaging of paraffin-embedded Human colon tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



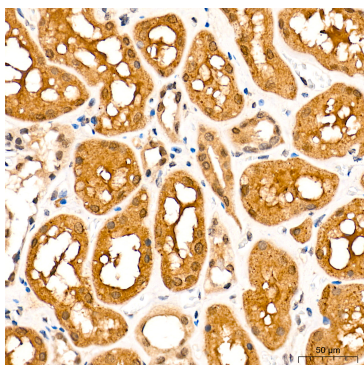
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at a dilution of 1:20000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

## Validation Data

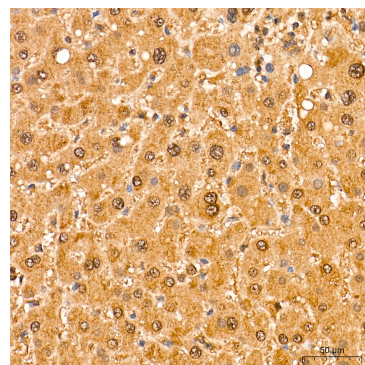
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Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at a dilution of 1:20000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at a dilution of 1:20000 (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 Human liver tissue using [KD Validated] SOD1 Rabbit PolymAb® (A27899PM) at a dilution of 1:20000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.