

# [KO Validated] SOD2 Rabbit mAb

Catalog No.: A19576

KO Validated

Recombinant

22 Publications

## Basic Information

**Observed MW**

22kDa

**Calculated MW**

25kDa

**Category**

Primary antibody

**Applications**

WB, IF-P, IHC-P, ELISA

**Cross-Reactivity**

Human, Mouse, Rat

**CloneNo number**

ARC0055

## Background

This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1.

## Recommended Dilutions

**WB** 1:10000 - 1:60000**IF-P** 1:200 - 1:800**IHC-P** 1:200 - 1:2000

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

## Immunogen Information

**Gene ID**

6648

**Swiss Prot**

P04179

**Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

**Synonyms**

GC1; IPOB; IPO-B; MNSOD; MVCD6; GCInc1; Mn-SOD; D2

## Contact

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

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

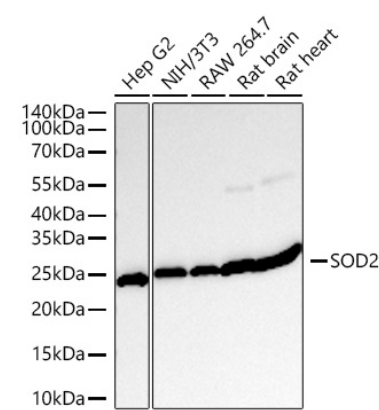
Affinity purification

**Storage**

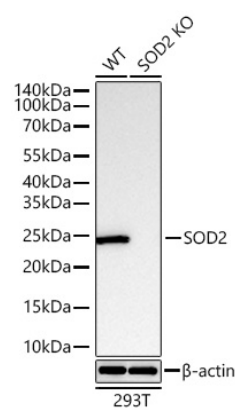
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

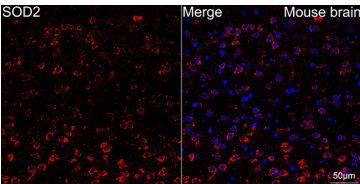
Validation Data



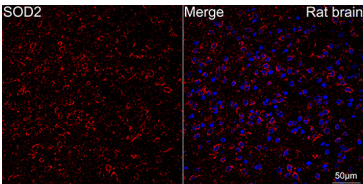
Western blot analysis of various lysates using [KO Validated] SOD2 Rabbit mAb (A19576) at 1:10000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



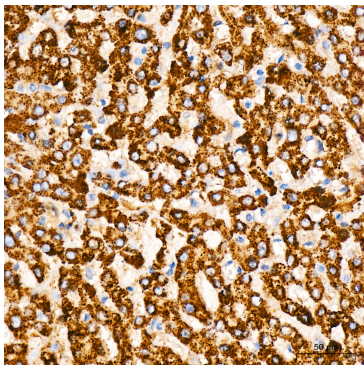
Western blot analysis of lysates from wild type (WT) and SOD2 knockout (KO) 293T cells using [KO Validated] SOD2 Rabbit mAb (A19576) at 1:10000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



Confocal imaging of paraffin-embedded Mouse brain tissue using [KO Validated] SOD2 Rabbit mAb (A19576, 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.



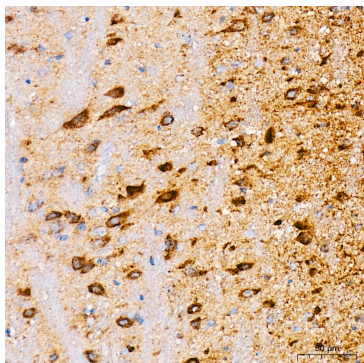
Confocal imaging of paraffin-embedded Rat brain tissue using [KO Validated] SOD2 Rabbit mAb (A19576, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



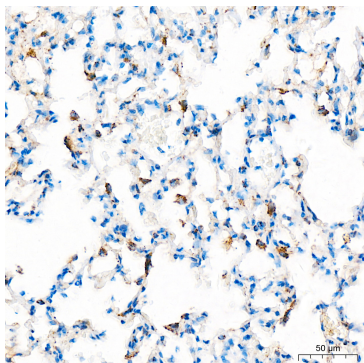
Immunohistochemistry analysis of paraffin-embedded Human liver tissue using [KO Validated] SOD2 Rabbit mAb (A19576) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.

## Validation Data

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Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using [KO Validated] SOD2 Rabbit mAb (A19576) at a dilution of 1:200 (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 lung tissue using [KO Validated] SOD2 Rabbit mAb (A19576) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.