ABclonal®

[KO Validated] SOD2 Rabbit pAb

Catalog No.: A1340 KO Validated 59 Publications

Basic Information

Observed MW

Calculated MW

25kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human, Mouse, Rat

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 1:500 - 1:2000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

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 ID6648

Swiss Prot
P04179

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 25-222 of human SOD2 (NP_000627.2).

Synonyms

GC1; IPOB; IPO-B; MNSOD; MVCD6; GClnc1; Mn-SOD; D2

Product Information

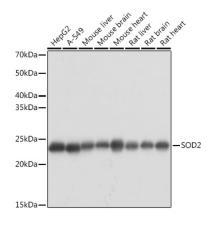
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

Validation Data



Western blot analysis of various lysates using [KO Validated] SOD2 Rabbit pAb (A1340) at 1:1000 dilution.

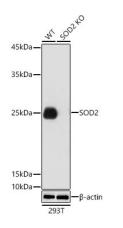
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.



Western blot analysis of lysates from wild type(WT) and SOD2 knockout (KO) 293T cells, using SOD2 Rabbit pAb (A1340) at 1:1000 dilution.

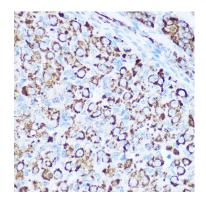
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

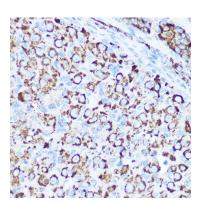
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

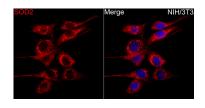
Exposure time: 1s.



Immunohistochemistry analysis of paraffin-embedded Rat ovary using SOD2 Rabbit pAb (A1340) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.

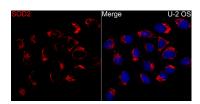


Immunohistochemistry analysis of paraffin-embedded Rat ovary using SOD2 Rabbit pAb (A1340) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.



Immunofluorescence analysis of NIH/3T3 cells using [KO Validated] SOD2 Rabbit pAb(A1340) at a dilution of 1:100 (40x lens). Secondary antibody:Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

Validation Data



Immunofluorescence analysis of U-2 OS cells using [KO Validated] SOD2 Rabbit pAb(A1340) at a dilution of 1:100 (40x lens). Secondary antibody:Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.