

For Research Use Only

# SOD2 Polyclonal antibody

Catalog Number: 24127-1-AP **405 Publications**



## Basic Information

### Catalog Number:

24127-1-AP

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG21388

### GenBank Accession Number:

BC016934

### GeneID (NCBI):

6648

### UNIPROT ID:

P04179

### Full Name:

superoxide dismutase 2,  
mitochondrial

### Calculated MW:

25 kDa

### Observed MW:

25 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IHC: 1:500-1:2000

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ELISA

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, chicken, zebrafish, bovine,  
sheep, goat

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

### Positive Controls:

WB : DU 145 cells, HEK-293 cells, HeLa cells, mouse  
brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : human liver cancer tissue, human breast cancer  
tissue, human colon tissue, human hepatocellular  
carcinoma

IF/ICC : HUVEC cells, HeLa cells

## Background Information

SOD2(superoxide dismutase 2, mitochondrial ) is also named as IPOB, MNSOD, SODM, Mn-SOD and belongs to the iron/manganese superoxide dismutase family. It is a marker of mitochondria, which is restricted to the perinuclear area in a cell with aggregate formation of mutant SOD1(PMID:12659845). It functions as the first line of antioxidant defense against highly reactive superoxide radicals and it appears to be early predictors for survival in septic patients with MIF(PMID:20863520). It has 2 isoforms with the molecular weight of 25 kDa and 21 kDa.

## Notable Publications

| Author       | Pubmed ID | Journal                | Application |
|--------------|-----------|------------------------|-------------|
| Huidong Wang | 36249770  | Front Pharmacol        | IF          |
| Dan Tang     | 34815154  | Phytomedicine          | WB          |
| Wen Zhang    | 31553975  | Kidney Blood Press Res | WB          |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

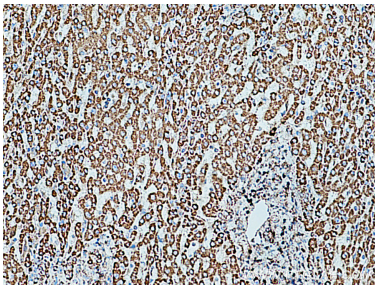
T: 4006900926

E: Proteintech-CN@ptglab.com

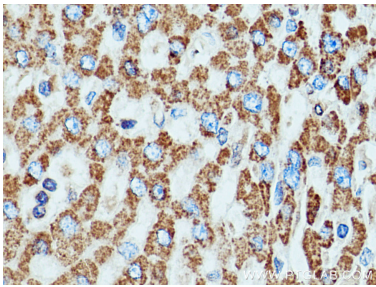
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

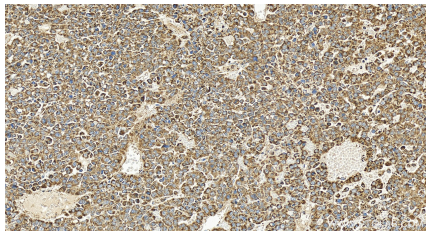
Selected Validation Data



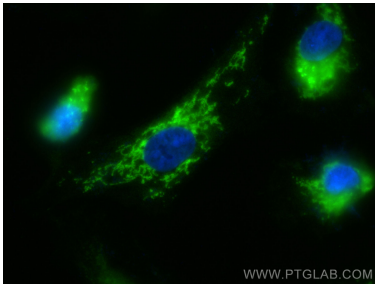
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24127-1-AP (SOD2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



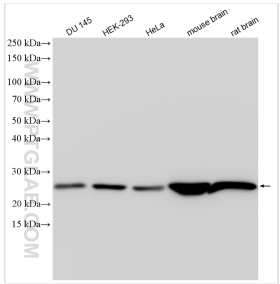
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24127-1-AP (SOD2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



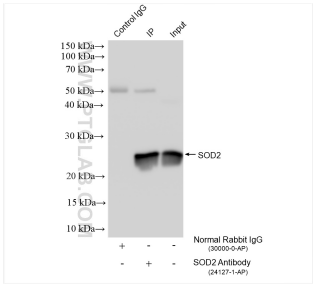
Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma slide using 24127-1-AP (SOD2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Sodium Citrate buffer (pH 6.0).



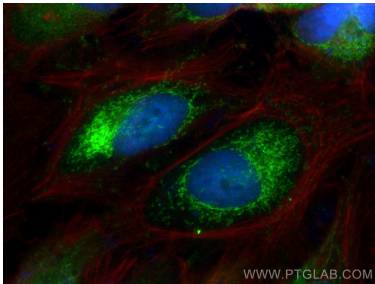
Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using SOD2 antibody (24127-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Various lysates were subjected to SDS PAGE followed by western blot with 24127-1-AP (SOD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-SOD2 (IP:24127-1-AP, 4ug; Detection:24127-1-AP 1:10000) with mouse brain tissue lysate 1840 ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using SOD2 antibody (24127-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-Phalloidin (red).