

For Research Use Only

# SOD2 Polyclonal antibody

Catalog Number: 24127-1-AP **365 Publications**



## Basic Information

<b>Catalog Number:</b> 24127-1-AP	<b>GenBank Accession Number:</b> BC016934	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 700 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6648	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P04179	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> superoxide dismutase 2, mitochondrial	IHC 1:500-1:2000
<b>Immunogen Catalog Number:</b> AG21388	<b>Calculated MW:</b> 25 kDa	IF/ICC 1:200-1:800
	<b>Observed MW:</b> 25 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IP, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF, IP, CoIP, ELISA	<b>WB :</b> DU 145 cells, HEK-293 cells, HeLa cells, mouse brain tissue, rat brain tissue
<b>Species Specificity:</b> human, mouse, rat	<b>IP :</b> mouse brain tissue,
<b>Cited Species:</b> human, mouse, rat, pig, chicken, zebrafish, bovine, sheep, goat	<b>IHC :</b> human liver cancer tissue, human breast cancer tissue, human colon tissue
<b>Note-IHC:</b> suggested antigen retrieval with <b>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IF/ICC :</b> 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

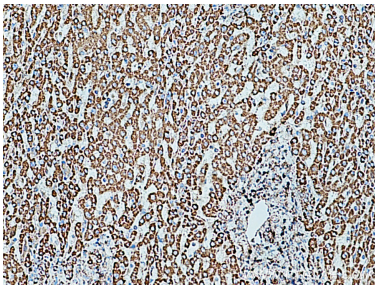
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

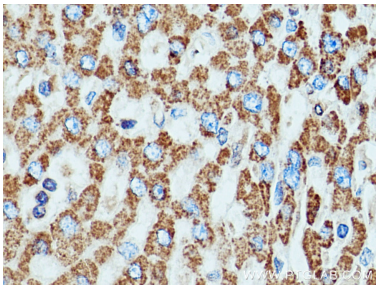
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

Selected Validation Data



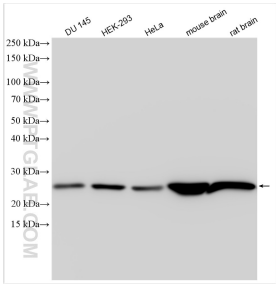
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24127-1-AP (SOD2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



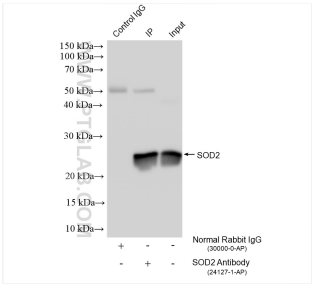
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24127-1-AP (SOD2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



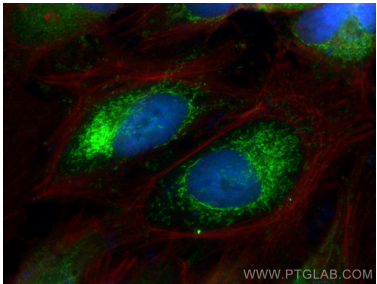
Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using SOD2 antibody (24127-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



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).