

## SOD2 Monoclonal antibody

Catalog Number: 66474-1-Ig

Featured Product

58 Publications

## Basic Information

## Catalog Number:

66474-1-Ig

## Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

## Source:

Mouse

## Isotype:

IgG2a

## 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:

Protein A purification

## CloneNo.:

3A6C2

## Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:2500-1:10000

IF/ICC 1:200-1:800

## Applications

## Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

## Cited Applications:

WB, IHC, IF, ColP

## Species Specificity:

human, mouse, rat, pig

## Cited Species:

human, mouse, rat, pig, 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**: U2OS cells, HeLa cells, ROS1728 cells, RAW 264.7 cells, pig brain tissue, rat brain tissue, mouse brain tissue

**IHC**: human liver cancer tissue, human liver tissue, human colon cancer tissue, human pancreas cancer tissue, mouse liver tissue, rat liver tissue

**IF/ICC**: HUVEC 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
Lupeng Chen	34603279	Front Immunol	WB
Ling Li	34532973	J Cell Mol Med	WB
Fan Yu	31669212	J Control Release	WB,IF

## Storage

## Storage:

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

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

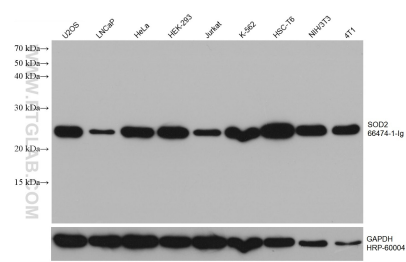
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

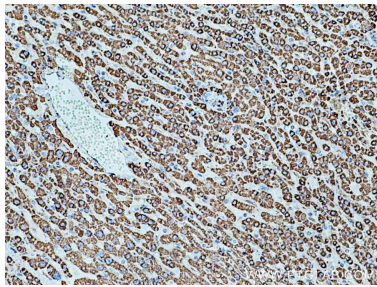
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
 W: [ptglab.com](http://ptglab.com)

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

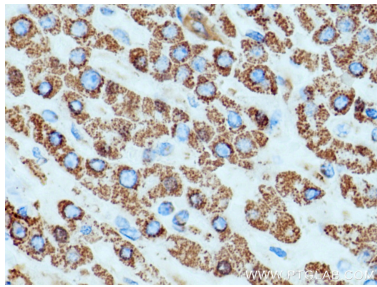
Selected Validation Data



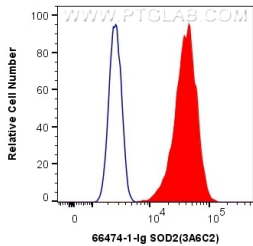
Various lysates were subjected to SDS PAGE followed by western blot with 66474-1-Ig (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



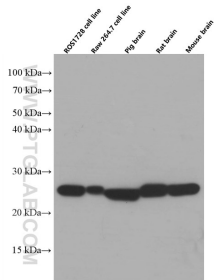
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



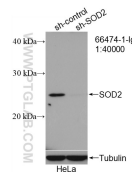
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



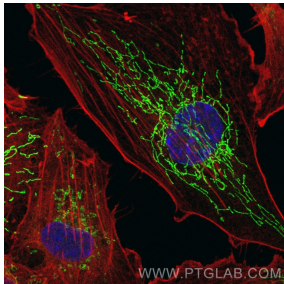
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human SOD2 (66474-1-Ig, Clone:3A6C2) and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (C1.18.4) (65208-1-Ig, Clone: C1.18.4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 66474-1-Ig (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



WB result of SOD2 antibody (66474-1-Ig; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SOD2 transfected HeLa cells.



Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using SOD2 antibody (66474-1-Ig, Clone: 3A6C2 ) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L).