

SOD2 Monoclonal antibody

Catalog Number: 66474-1-Ig

Featured Product

67 Publications

Basic Information

Catalog Number:

66474-1-Ig

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

FC (Intra): 0.40 ug per 10⁶ cells in a
100 µl suspension

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,**FC (Intra)**: 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
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, pH7.3

Aliquoting is unnecessary for -20°C storage

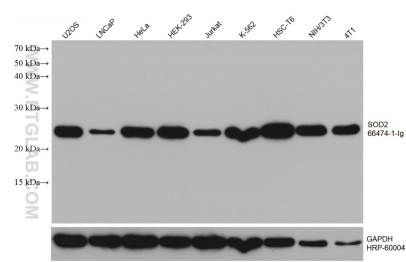
For technical support and original validation data for this product please contact:

T: 4006900926

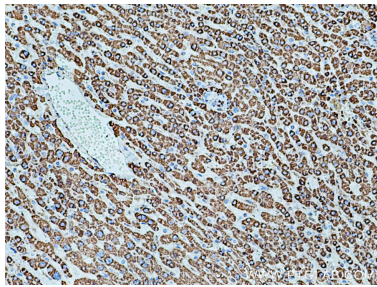
E: Proteintech-CN@ptglab.comW: ptgcn.com

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other manufacturer.**

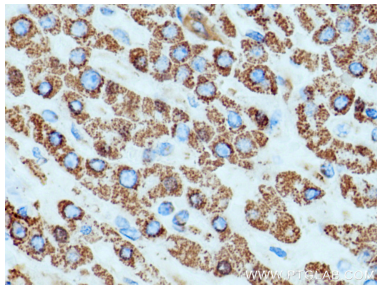
Selected Validation Data



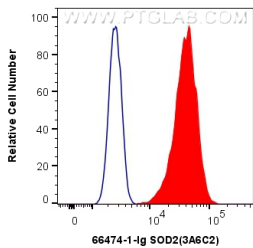
Various lysates were subjected to SDS PAGE followed by western blot with 66474-1-Ig (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



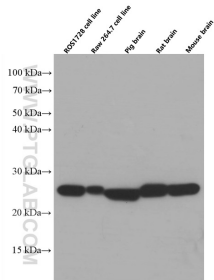
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



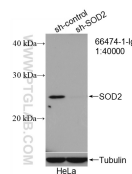
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



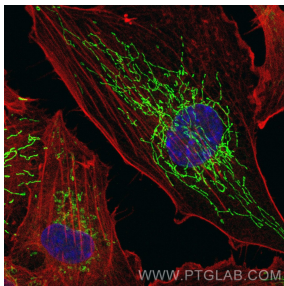
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human SOD2 (66474-1-Ig, Clone:3A6C2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (C1.18.4) (65208-1-Ig, Clone: C1.18.4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



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 AffiniPure Goat Anti-Mouse IgG(H+L).