

SOD2 Monoclonal antibody

Catalog Number: 66474-1-Ig

Featured Product

65 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

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

*** 20ul sizes contain 0.1% BSA

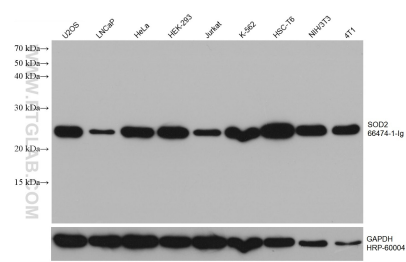
For technical support and original validation data for this product please contact:

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

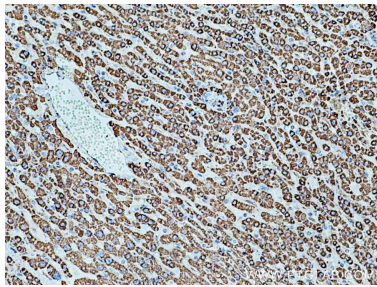
E: proteintech@ptglab.com
 W: ptglab.com

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

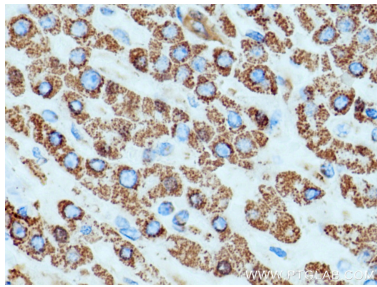
Selected Validation Data



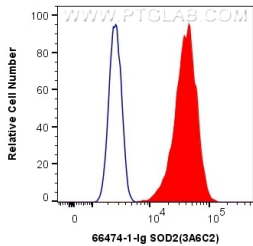
Various lysates were subjected to SDS PAGE followed by western blot with 66474-1-Ig (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



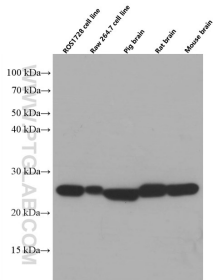
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



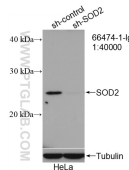
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66474-1-Ig (SOD2 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



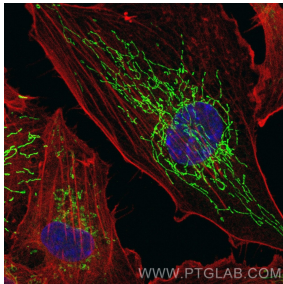
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human SOD2 (66474-1-Ig, Clone:3A6C2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (C1.18.4) (65208-1-Ig, Clone: C1.18.4) (blue). Cells were fixed with 4% PFA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