

For Research Use Only

# SOD1 Monoclonal antibody, PBS Only



Catalog Number: 67480-1-PBS

Featured Product

## Basic Information

<b>Catalog Number:</b> 67480-1-PBS	<b>GenBank Accession Number:</b> BC001034	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 6647	<b>CloneNo.:</b> 2F10G1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P00441	
<b>Isotype:</b> IgG2a	<b>Full Name:</b> superoxide dismutase 1, soluble	
<b>Immunogen Catalog Number:</b> AG28553	<b>Calculated MW:</b> 16 kDa	
	<b>Observed MW:</b> 16-20 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA, IHC, IF, FC

**Species Specificity:**  
Human, Mouse, Rat, Pig, Rabbit

## Background Information

The enzymatic function of Cu/Zn Superoxide Dismutase (SOD1), previously known as hemocuprein and IPOA, was first characterized in 1969 (PMID: 5389100). SOD1 is commonly known for its ROS scavenging activity, but recent work has uncovered additional roles in modulating metabolism, maintaining redox balance, and regulating transcription. In disease contexts, SOD1 is best-known for its role in a familial form of amyotrophic lateral sclerosis (fALS) (PMID: 10630188). In addition, SOD1 is overexpressed in numerous cancer types, including lung adenocarcinoma, non-small-cell lung cancer, and 70% of primary breast cancers (PMID: 31344643). SOD1 can be detected 24, 32, 40 and 48 kDa by ubiquitination (PMID: 16943203).

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

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

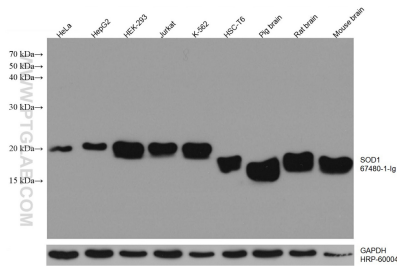
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

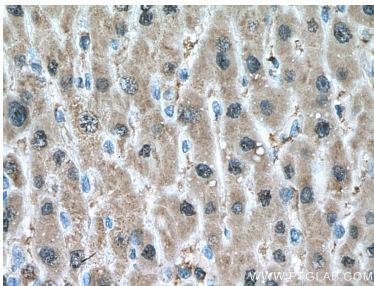
W: [ptgcn.com](http://ptgcn.com)

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

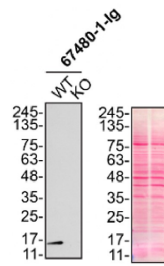
## Selected Validation Data



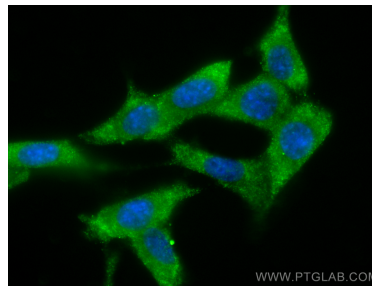
Various lysates were subjected to SDS PAGE followed by western blot with 67480-1-Ig (SOD1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 67480-1-PBS in a different storage buffer formulation.



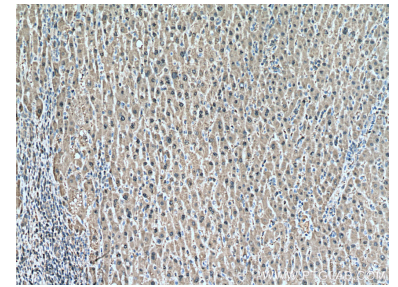
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67480-1-Ig (SOD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67480-1-PBS in a different storage buffer formulation.



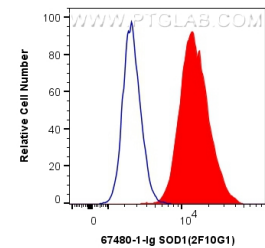
HeLa (WT and SOD1 KO) lysates prepared with RIPA buffer, 20  $\mu$ g protein loaded. 67480-1-Ig incubated at 1:10000 at 4°C overnight in 5% milk in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 67480-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed NIH/3T3 cells using SOD1 antibody (67480-1-Ig, Clone: 2F10G1) at dilution of 1:800 and Coralite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67480-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67480-1-Ig (SOD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67480-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> HEK-293T cells were intracellularly stained with 0.4  $\mu$ g Anti-Human SOD1 (67480-1-Ig, Clone:2F10G1) and Coralite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4  $\mu$ g 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). This data was developed using the same antibody clone with 67480-1-PBS in a