## For Research Use Only

## SOD2 Recombinant antibody

Catalog Number:83519-3-RR



**Basic Information** 

Catalog Number: GenBank Accession Number: 83519-3-RR BC016934
Size: GeneID (NCBI): 1000 ug/ml 6648

Source: UNIPROT ID: Rabbit P04179
Isotype: Full Name:

gG superoxide dismutase 2, mitochondrial

Immunogen Catalog Number: mitochondrial
AG21388 Calculated MW: 25 kDa

Observed MW: 25 kDa Purification Method:

Protein A purfication

CloneNo.: 240462D8

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:500-1:2000

**Applications** 

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

human, mouse, rat

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: HepG2 cells, HeLa cells, SH-SY5Y cells, MCF-7 cells, NIH/3T3 cells, mouse brain tissue, rat brain

tissue

IHC: human ovary cancer 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 with MIF(PMID:20863520). It has 2 isoforms with the molecular weight of 25 kDa and 21 kDa.

Storage

Storage:

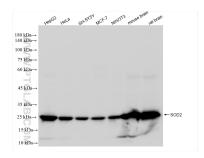
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

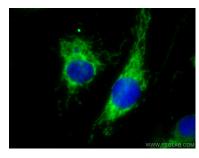
## **Selected Validation Data**



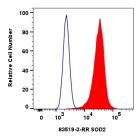
HepG2 cells were subjected to SDS PAGE followed by western blot with 83519-3-RR (SOD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83519-3-RR (SOD2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using SOD2 antibody (83519-3-RR, Clone: 240462D8) at dilution of 1:1000 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug SOD2 Recombinant antibody (83519-3-RR, Clone:240462D8) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).