## For Research Use Only

## SOD2 Recombinant antibody, PBS Only

Catalog Number:83519-4-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

83519-4-PBS

BC016934 GeneID (NCBI): Protein A purfication

Size:

6648

CloneNo.: 240462H8

100ug, Concentration: 1 mg/ml by Nanodrop;

**UNIPROT ID:** 

Source: Rabbit

P04179 Full Name:

Isotype:

superoxide dismutase 2,

IgG

mitochondrial

Immunogen Catalog Number:

Calculated MW:

AG21388

25 kDa

Observed MW:

25 kDa

**Applications** 

**Tested Applications:** 

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

Species Specificity:

human, mouse, rat

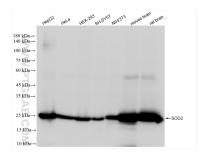
## **Background Information**

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.

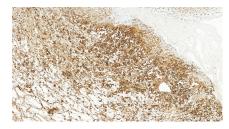
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

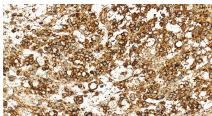
## **Selected Validation Data**



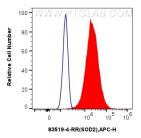
Various lysates were subjected to SDS PAGE followed by western blot with 83519-4-RR (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83519-4-PBS in a different storage buffer formulation.



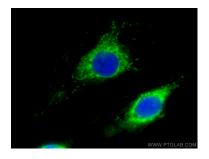
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83519-4-RR (SOD2 antibody) at dilution of 1:3000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83519-4-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83519-4-RR (SOD2 antibody) at dilution of 1:3000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83519-4-PBS in a different storage buffer formulation.



1x10^6 A549 cells were intracellularly stained with 0.25 ug Sod2 Recombinant Antibody (83519-4-RR, Clone:240462H8) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (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 83519-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using SOD2 antibody (83519-4-RR, Clone: 240462H8) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). This data was developed using the same antibody clone with 83519-4-PBS in a different storage buffer formulation.