

For Research Use Only

SOD2 Recombinant antibody

Catalog Number:83519-4-RR



Basic Information

Catalog Number: 83519-4-RR	GenBank Accession Number: BC016934	Purification Method: Protein A purification
Size: 100ul , Concentration: 800 ug/ml by Nanodrop;	GeneID (NCBI): 6648	CloneNo.: 240462H8
Source: Rabbit	UNIPROT ID: P04179	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1500-1:6000 IF/ICC 1:400-1:1600
Isotype: IgG	Full Name: superoxide dismutase 2, mitochondrial	
Immunogen Catalog Number: AG21388	Calculated MW: 25 kDa	
	Observed MW: 25 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), 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, HEK-293 cells, SH-SY5Y 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

***** 20ul sizes contain 0.1% BSA**

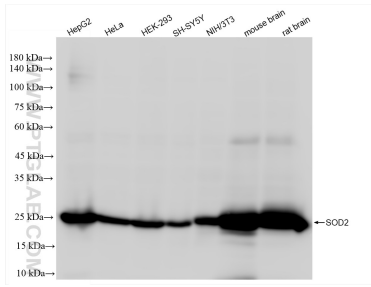
For technical support and original validation data for this product please contact:

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

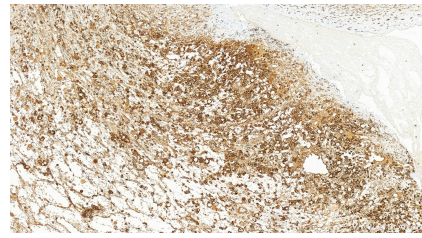
E: proteintech@ptglab.com
W: ptglab.com

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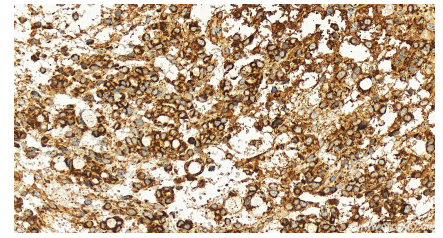
Selected Validation Data



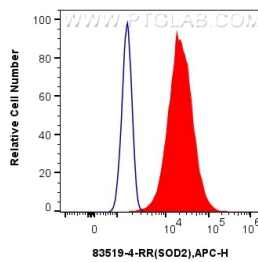
Various lysates were subjected to SDS PAGE followed by western blot with 83519-4-RR (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



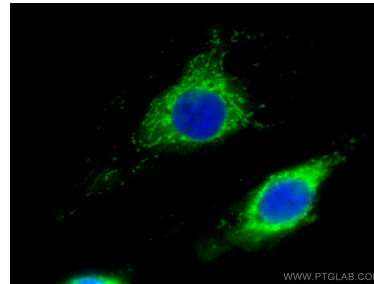
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83519-4-RR (SOD2 antibody) at dilution of 1:3000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



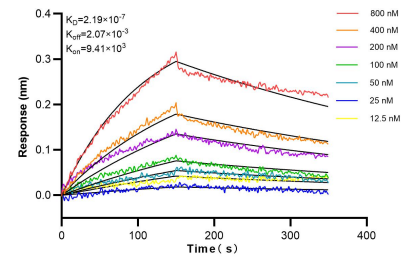
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83519-4-RR (SOD2 antibody) at dilution of 1:3000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 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).



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).



Bi-layer interferometry (BLI) kinetic assays of 83519-4-RR against Human SOD2 were performed. The affinity constant is 219 nM.