For Research Use Only

SOD2 Recombinant antibody

Catalog Number:83519-4-RR



Basic Information

Catalog Number: 83519-4-RR

Size: 800 μ g/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG21388

Tested Applications:

Species Specificity:

human, mouse, rat

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

25 kDa

GenBank Accession Number:

BC016934 GeneID (NCBI):

6648 **UNIPROT ID:**

P04179 Full Name: superoxide dismutase 2,

mitochondrial

Calculated MW: 25 kDa

Observed MW:

Positive Controls:

WB: HepG2 cells, HeLa cells, HEK-293 cells, SH-SY5Y cells, NIH/3T3 cells, mouse brain tissue, rat brain

Purification Method:

Protein A purfication

Recommended Dilutions:

WB 1:5000-1:50000 IF/ICC 1:400-1:1600

CloneNo.:

240462H8

IF/ICC: HUVEC cells,

Applications

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.

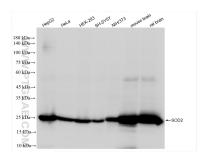
Storage

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

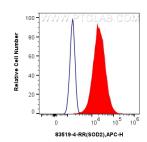
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

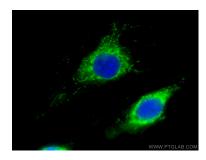
Selected Validation Data



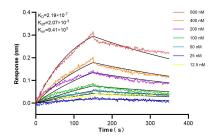
Various lysates were subjected to SDS PAGE followed by western blot with 83519-4-RR (SOD2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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).



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).



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