Product datasheet

Anti-SOD2 Antibody (Clone#2B12B1)

Catalog Number: *M00349-3*

BOSTER
antibody and ELISA experts
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Basic Information

Product Name	Anti-SOD2 Antibody (Clone#2B12B1)
Gene Name	SOD2
Source	Mouse
Isotype	IgG2b
Species Reactivity	human, mouse
Tested Application	WB, IHC
Contents	500 ug/ml antibody with PBS， 0.02% NaN3 , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SOD2 (192-222aa QYKNVRPDYLKAIWNVINWENVTERYMACKK), different from the related mouse sequence by one amino acid, and from the related rat sequence by four amino acids.
concentration	500 ug/ml
Purification	protein G purified.
Observed MW	25KD
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt，-20℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

SOD2(Superoxide Dismutase 2), also called IPO-B or MNSOD, is a mitochondrial matrix enzyme that scavenges oxygen radicals produced by the extensive oxidation-reduction and electron transport reactions occurring in mitochondria. This gene is a member of the iron/manganese superoxide dismutase family. Using a somatic cell hybrid panel containing different segments of chromosome 6, they demonstrated that SOD2 is located in the region 6q25.3-qter which, together with the FISH analysis, indicated that SOD2 is in the distal portion of 6q25. The SOD2 gene encodes an intramitochondrial free radical scavenging enzyme that is the first line of defense against superoxide produced as a byproduct of oxidative phosphorylation. Adeno-associated viral delivery of the human SOD2 gene resulted in suppression of optic nerve degeneration and rescue of retinal ganglion cells. The findings suggested that reactive oxygen species contributed to retinal cell death and optic nerve damage in mice with complex I deficiency, and that expression of SOD2 attenuated the disease process.

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Selected Validation Data

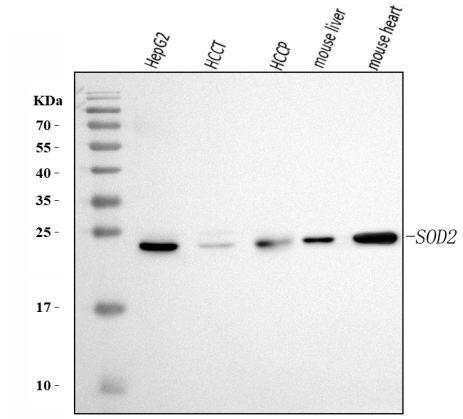

Figure 1. Western blot analysis of anti- SOD2 Antibody (M00349-3). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: HEPG2 whole cell lysates,
Lane 2: HCCP tissue lysates,
Lane 3: HCCP tissue lysates,
Lane 4: mouse liver tissue lysates,
Lane 5: mouse heart tissue lysates.
Use mouse anti- SOD2 1:1000, probed with a goat anti-mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for SOD2 at approximately 25KD. The expected band size for SOD2 is at 25KD.