Product datasheet

Anti-SOD2 Antibody

Catalog Number: *BA4566*

BOSTER
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Basic Information

Product Name	Anti-SOD2 Antibody
Gene Name	SOD2
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC
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 N-terminus of human SOD2(45-62aa QIMQLHHSKHHAAYVNNL), identical to the related mouse sequence and different from the related rat sequence by one amino acid.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	24KD
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry in fixed cells (ICC): 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.

Reference

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Anti-SOD2 Antibody被引用在6文献中。

Selected Validation Data

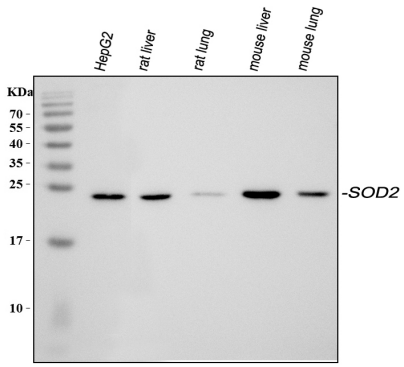

Figure 1. Western blot analysis of anti- SOD2 antibody (BA4566). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human HepG2 whole cell lysates,
Lane 2: rat liver tissue lysates,
Lane 3: rat lung tissue lysates,
Lane 4: mouse liver tissue lysates,
Lane 5: mouse lung tissue lysates.
Use rabbit anti- SOD2 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for SOD2 at approximately 24KD. The expected band size for SOD2 is at 25KD.

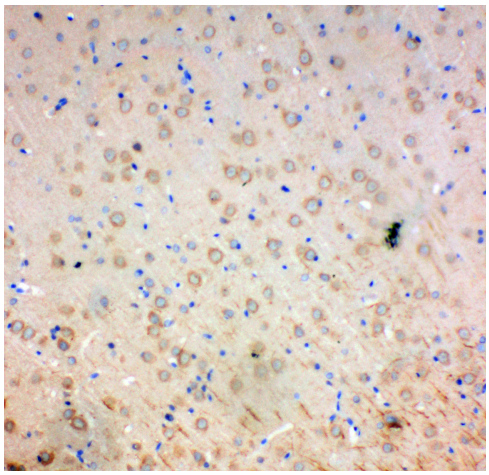

Figure 2. IHC analysis using anti- SOD2 antibody (BA4566). detected in paraffin-embedded section of rat brain tissue. Peroxidase Conjugated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.