

Anti-SOD2 Antibody

Catalog # ABO11083

Product Information

Application	WB, IHC-P, ICC
Primary Accession	P04179
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Superoxide dismutase[Mn], mitochondrial(SOD2) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6648
Other Names	Superoxide dismutase [Mn], mitochondrial, 1.15.1.1, SOD2
Calculated MW	24750
Application Details	Immunocytochemistry , 0.5-1 μ g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Mitochondrion matrix.
Source	Eukaryota
Protein Name	Superoxide dismutase[Mn], mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
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.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also

be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Belongs to the iron/manganese superoxide dismutase family.

Sequence Similarities

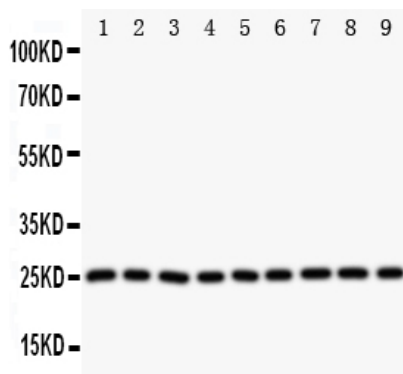
Protein Information

Name	SOD2
Function	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.
Cellular Location	Mitochondrion matrix.

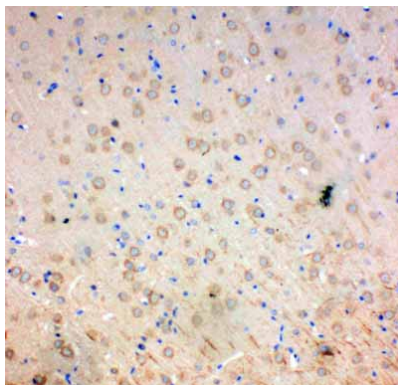
Background

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.

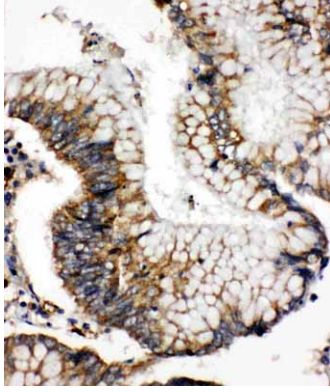
Images



Anti-SOD2 antibody, ABO11083, Western blotting
All lanes: Anti SOD2 (ABO11083) at 0.5ug/ml
Lane 1: Rat Liver Tissue Lysate at 50ug
Lane 2: Rat Intestine Tissue Lysate at 50ug
Lane 3: Rat Lung Tissue Lysate at 50ug
Lane 4: Rat Heart Tissue Lysate at 50ug
Lane 5: SMMC Whole Cell Lysate at 40ug
Lane 6: HELA Whole Cell Lysate at 40ug
Lane 7: COLO320 Whole Cell Lysate at 40ug
Lane 8: SW620 Whole Cell Lysate at 40ug
Lane 9: A549 Whole Cell Lysate at 40ug
Predicted bind size: 25KD
Observed bind size: 25KD



Anti-SOD2 antibody, ABO11083, IHC(P)
IHC(P): Rat Brain Tissue



Anti-SOD2 antibody, ABO11083, IHC(P)IHC(P): Human Intestinal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.