

Basic Information

Product Name	Anti-SOD1 Antibody	
Gene Name	SOD1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of Human SOD1, different from the mouse sequence by two amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	18 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 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°C as supplied.

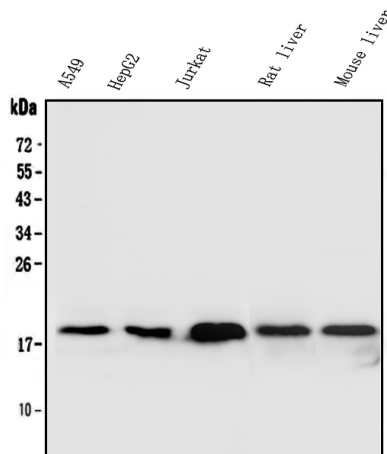
Background Information

Superoxide dismutases(SOD) are a class of enzymes that catalyze the dismutation of superoxide into oxygen and hydrogen peroxide. As such, they are an important antioxidant defense in nearly all cells exposed to oxygen. One of the exceedingly rare exceptions is Lactobacillus plantarum and related lactobacilli, which use a different mechanism.Cu,Zn-SOD was found widely distributed in the cell cytosol and in the cell nucleus, consistent with it being a soluble cytosolic protein. Mitochondria and secretory compartments did not label for this protein. In human cells, peroxisomes showed a labeling density slightly less than that of cytoplasm.

Reference

Anti-SOD1 Antibody被引用在11文献中。

Selected Validation Data



Western blot analysis of SOD1 using anti-SOD1 antibody (BA1401). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,

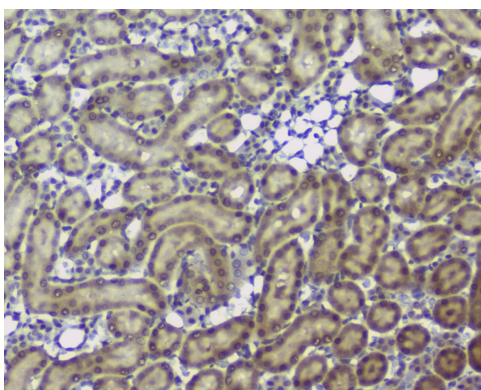
Lane 2: human hepg2 whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: Rat liver tissue lysates,

Lane 5: Mouse liver tissue lysates.

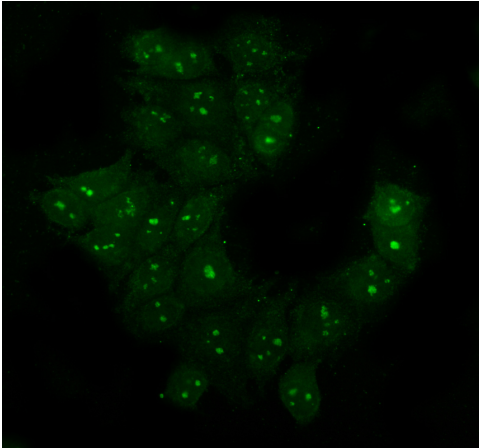
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SOD1 antigen affinity purified polyclonal antibody (BA1401) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SOD1 at approximately 18 kDa. The expected band size for SOD1 is at 16 kDa.



IHC analysis of SOD1 using anti-SOD1 antibody (BA1401).

SOD1 was detected in a paraffin-embedded section of rat kidney tissue.

Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-SOD1 Antibody (BA1401) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of SOD1 using anti-SOD1 antibody (BA1401).

SOD1 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with rabbit anti-SOD1 Antibody (BA1401) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody.