

## Basic Information

Product Name	Anti-SOD1 Antibody	
Gene Name	SOD1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of Human SOD1 (116-146aa RTLNVHEKADDLGKGGNEESTKTGNAGSRLA), different from the related mouse and rat sequences by two amino acids.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	16-18KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 <sup>6</sup> cells (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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## 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3文献中。

## Selected Validation Data

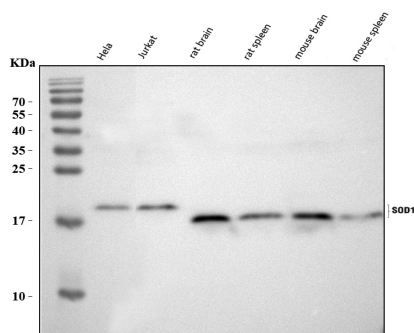


Figure 1. Western blot analysis of anti- SOD1 antibody (PB0453).

The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: rat brain tissue lysates,

Lane 4: rat spleen tissue lysates,

Lane 5: mouse brain tissue lysates,

Lane 6: mouse spleen tissue lysates.

Use rabbit anti- SOD1 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 SOD1 at approximately 16-18KD. The expected band size for SOD1 is at 16KD.

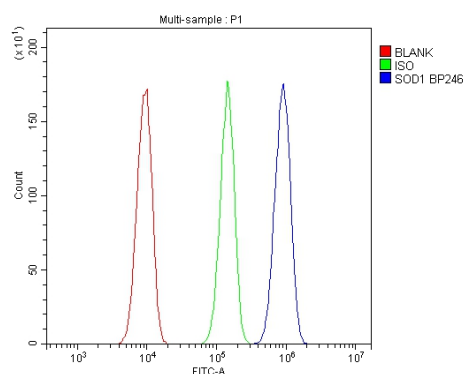


Figure 9. Flow cytometry analysis of A549 cell(1x10<sup>6</sup>) DyLight 488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).