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Anti-SOD1 Picoband Antibody

Catalog # ABO12093

Specification

Anti-SOD1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P00441
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Superoxide dismutase [Cu-Zn](SOD1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SOD1 Picoband Antibody - Additional Information

Gene ID 6647

Other Names
Superoxide dismutase [Cu-Zn], 1.15.1.1, Superoxide dismutase 1, hSod1, SOD1

Calculated MW
15936 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cytoplasm. Nucleus. Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

Protein Name
Superoxide dismutase [Cu-Zn]

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of Human SOD1 (116-146aa RTLVVHEKADDLGKGGNEESTKTGNAGSRLA), different from the related mouse and rat sequences by two amino acids.

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.

Sequence Similarities
Belongs to the Cu-Zn superoxide dismutase family.

Anti-SOD1 Picoband Antibody - Protein Information

Name SOD1 (HGNC:11179)

Function
Destroys radicals which are normally produced within the cells and which are toxic to biological systems.

Cellular Location
Cytoplasm. Nucleus. Note=Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

Anti-SOD1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SOD1 Picoband Antibody - Images

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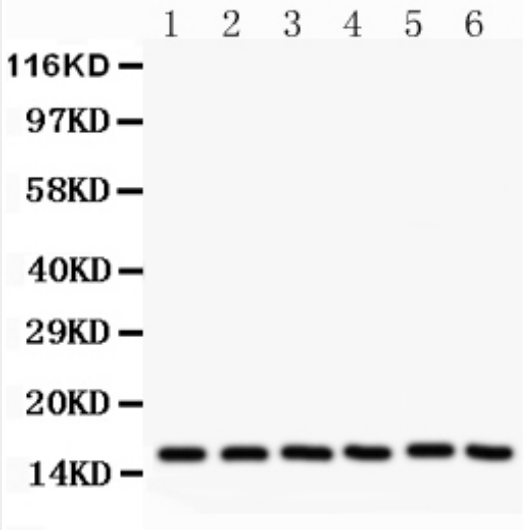

Anti- SOD1 Picoband antibody, ABO12093, Western blottingAll lanes: Anti SOD1 (ABO12093) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: COLO320 Whole Cell Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 16KDObserved bind size: 16KD

Anti-SOD1 Picoband Antibody - Background

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.