10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Superoxide Dismutase 1 (SOD-1) Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11197

Specification

Superoxide Dismutase 1 (SOD-1) Antibody - Product Information

Application	**WB**
Primary Accession	P00441
Other Accession	AAR21563
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**15936**

Superoxide Dismutase 1 (SOD-1) Antibody - Additional Information

Gene ID 6647

Positive Control	**Western Blot: 3T3 cell lysate, rat kidney lysate**
Application & Usage	**Western blot: 1:200**

Other Names
Superoxide Dismutase 1, SODC

Target/Specificity
SOD1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg or 30 µg (0.5 mg/ml) of antibody in PBS containing 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol, pH 7.2

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Superoxide Dismutase 1 (SOD-1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Superoxide Dismutase 1 (SOD-1) 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.

Superoxide Dismutase 1 (SOD-1) 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

Superoxide Dismutase 1 (SOD-1) Antibody - Images

Superoxide Dismutase 1 (SOD-1) Antibody - Background

Superoxide Dismutase (SOD) is an oxidoreductase that catalyzes the reaction between superoxide anions and hydrogen to yield molecular oxygen and hydrogen peroxide. The enzyme protects the cell against dangerous levels of superoxide. It belongs to the Cu-Zn superoxide dismutase family. It binds copper and zinc ions. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. SOD1 destroys radicals which are normally produced within the cells and which are toxic to biological systems. Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1). ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of cases leading to familial forms.