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Mouse Monoclonal Antibody SOD1 conjugated to Sepharose Beads

CatalogNo: ANT8065-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

SOD1 (ANTO013R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species
Reactivity
WB,IHC,IF,IP,ELISA

MW
Isotype
23kD (Calculated) • IgG,Kappa
15kD (Observed)

Recommended Dilution Ratios

ID

Basic Information

Clonality Monoclonal

Clone Number ANT0013R

Immunogen Information Specificity

Endogenous

Gene name SOD1

Protein Name Superoxide dismutase [Cu-Zn]

| Organism | Gene ID | UniProt ID |
|----------|----------------|-----------------|
| Human | <u>6647</u> ; | <u>P00441</u> ; |
| Mouse | <u>20655</u> ; | <u>P08228</u> ; |
| Rat | <u>24786</u> ; | <u>P07632</u> ; |

Cellular Localization

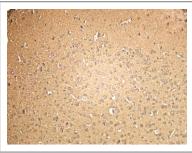
Cytoplasm, Nucleus

Tissue specificity Colon, Fetal brain cortex, Placenta,

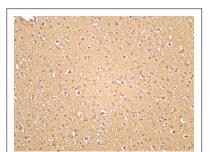
Function

Catalytic activity: 2 superoxide + 2 H(+) = O(2) + H(2)O(2)., cofactor: Binds 1 copper ion per subunit.,cofactor:Binds 1 zinc ion per subunit.,Disease:Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1) [MIM:105400]. 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., Function: Destroys radicals which are normally produced within the cells and which are toxic to biological systems., miscellaneous: The protein (both wild-type and ALS1 variants) has a tendency to form fibrillar aggregates in the absence of the intramolecular disulfide bond or of bound zinc ions. These aggregates may have cytotoxic effects. Zinc binding promotes dimerization and stabilizes the native form.,online information:ALS genetic mutations db,online information:Superoxide dismutase entry, ANTM: Unlike wild-type protein, the pathogenics variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 are polyubiquitinated by RNF19A; which leads to their proteasomal degradation., similarity: Belongs to the Cu-Zn superoxide dismutase family., subunit: Homodimer. The pathogenics variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 interact with RNF19A, whereas wild-type protein does not.,

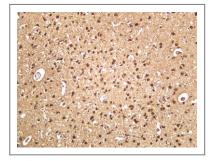
Validation Data



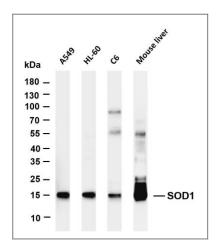
Mouse brain was stained with anti-SOD1 (ANT0013R)



rabbit antibody
Human brain was stained with anti-SOD1 (ANT0013R) rabbit antibody



Rat brain was stained with anti-SOD1 (ANT0013R) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SOD1 (ANT0013R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: HL-60 Lane 3: C6 Lane 4: Mouse liver Predicted band size: 23kDa Observed band size: 15kDa

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