

Rabbit anti-Human SOD1 Polyclonal Antibody | anti-SOD1 antibody

Anti-SOD1 Antibody, Rabbit Polyclonal

CATALOG # AAA256105	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunoprecipitation, Western Blot
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PRODUCT SYNONYMS

SOD1; Polyclonal Antibody; Anti-SOD1 Antibody; Rabbit Polyclonal; SOD1 Antibody; Rabbit PAb; Antigen Affinity Purified; superoxide dismutase 1; soluble; Anti-ALS Antibody; Anti-ALS1 Antibody; Anti-HEL-S-44 Antibody; Anti-homodimer Antibody; Anti-hSod1 Antibody; Anti-IPOA Antibody; Anti-SOD Antibody; anti-SOD1 antibody

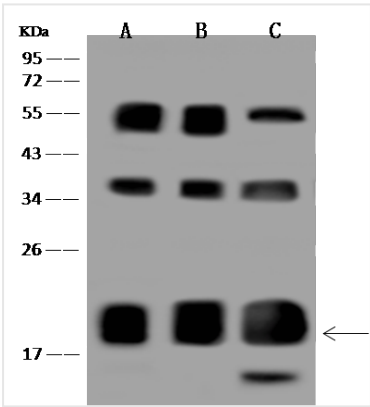
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human SOD1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; PBS, pH7.0 with 0.03% Proclin300
Applicable Applications for anti-SOD1 antibody	IP (Immunoprecipitation), WB (Western Blot)
Immunogen	E Coli-derived Human SOD1 fragment
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with E Coli-derived Human SOD1 fragment, and purified by antigen affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles.



IP (Immunoprecipitation)

SOD1 was immunoprecipitated using: Lane A: 0.5 mg Jurkat Whole Cell Lysate, 4 uL anti-SOD1 rabbit polyclonal antibody and 60 ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti-SOD1 rabbit polyclonal antibody, at 1:100 dilution. Secondary antibody: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 20 kDa. Observed band size: 20 kDa.



WB (Western Blot)

Anti-SOD1 rabbit polyclonal antibody at 1:500 dilution. Lane A: HeLa Whole Cell Lysate. Lane B: 293T Whole Cell Lysate. Lane C: Jurkat Whole Cell Lysate. Lysates/proteins at 30 ug per lane. Secondary: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 16 kDa. Observed band size: 18 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SOD1 antibody	SOD1 belongs to the Cu-Zn superoxide dismutase family. It binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. 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.
References	Murakami K, et al. (2011) SOD1 (copper/zinc superoxide dismutase) deficiency drives amyloid beta protein oligomerization and memory loss in mouse model of Alzheimer disease. J Biol Chem. 286(52):44557-68. Thompson M, et al. (2012) Paradoxical roles of serine racemase and D-serine in the G93A mSOD1 mouse model of amyotrophic lateral sclerosis. J Neurochem. 120(4):598-610. Magrane J, et al. (2012) Mitochondrial dynamics and bioenergetic dysfunction is associated with synaptic alterations in mutant SOD1 motor neurons. J Neurosci. 32(1):229-42. Gertz B, et al. (2012) Nuclear localization of human SOD1 and mutant SOD1-specific disruption of survival motor neuron protein complex in transgenic amyotrophic lateral sclerosis mice. J Neuropathol Exp Neurol. 71(2):162-77.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.