



# SOD-1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02787
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	SOD1
<b>Protein Name</b>	Superoxide dismutase [Cu-Zn]
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human SOD-1. AA range:36-85
<b>Specificity</b>	SOD-1 Polyclonal Antibody detects endogenous levels of SOD-1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	SOD1; Superoxide dismutase [Cu-Zn]; Superoxide dismutase 1; hSod1
<b>Observed Band</b>	18kD
<b>Cell Pathway</b>	Cytoplasm . Mitochondrion . Nucleus . Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria. .
<b>Tissue Specificity</b>	Colon,Fetal brain cortex,Placenta,
<b>Function</b>	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
<b>Background</b>	The protein encoded by this gene 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. [provided by RefSeq, Jul 2008],

**matters needing attention**

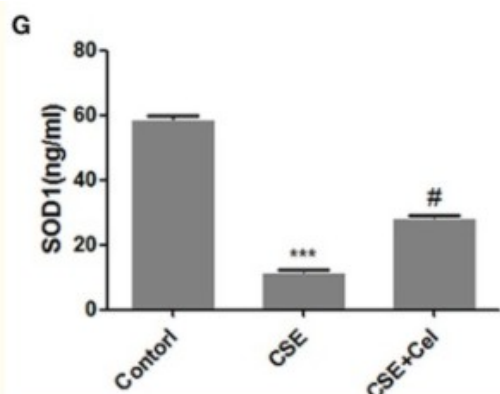
Avoid repeated freezing and thawing!

**Usage suggestions**

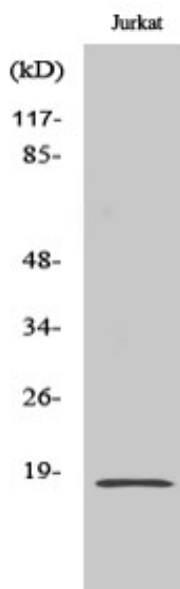
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



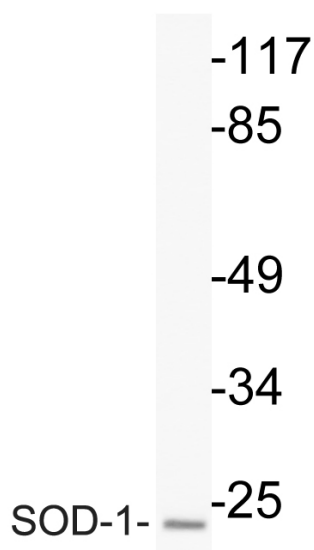
## Products Images



Chen, Qiong, et al. "Celastrol Alleviates Chronic Obstructive Pulmonary Disease by Inhibiting Cellular Inflammation Induced by Cigarette Smoke via the Ednrb/Kng1 Signaling Pathway." *Frontiers in pharmacology* 9 (2018): 1276.



Western Blot analysis of various cells using SOD-1 Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysate from Jurkat cells, using SOD-1 antibody.