

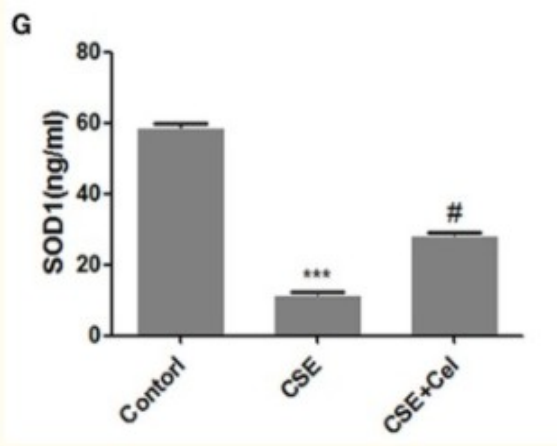
## SOD-1 Polyclonal Antibody

|                              |   |
|------------------------------|---|
| <b>Catalog No :</b>          | YT4364  |
| <b>Reactivity :</b>          | Human;Mouse;Rat   |
| <b>Applications :</b>        | WB;ELISA  |
| <b>Target :</b>              | SOD-1   |
| <b>Fields :</b>              | >>Peroxisome;>>Longevity regulating pathway - multiple species;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species |
| <b>Gene Name :</b>           | SOD1  |
| <b>Protein Name :</b>        | Superoxide dismutase [Cu-Zn]  |
| <b>Human Gene Id :</b>       | 6647  |
| <b>Human Swiss Prot No :</b> | P00441  |
| <b>Mouse Gene Id :</b>       | 20655   |
| <b>Mouse Swiss Prot No :</b> | P08228  |
| <b>Rat Gene Id :</b>         | 24786   |
| <b>Rat Swiss Prot No :</b>   | P07632  |
| <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  |

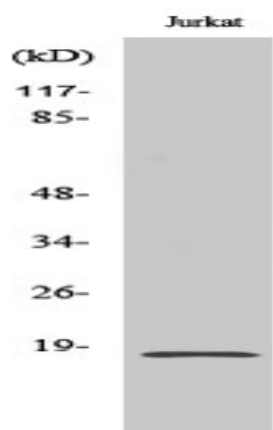
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|-------------------------------|---|
| <b>Dilution :</b>             | <u>WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.</u>   |
| <b>Purification :</b>         | <u>The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.</u>  |
| <b>Concentration :</b>        | <u>1 mg/ml</u>  |
| <b>Storage Stability :</b>    | <u>-15°C to -25°C/1 year(Do not lower than -25°C)</u>   |
| <b>Observed Band :</b>        | <u>18kD</u>   |
| <b>Cell Pathway :</b>         | <u>Amyotrophic lateral sclerosis (ALS);Huntington's disease;Prion diseases;</u>   |
| <b>Background :</b>           | <u>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],</u>  |
| <b>Function :</b>             | <u>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</u> |
| <b>Subcellular Location :</b> | <u>Cytoplasm . Mitochondrion . Nucleus . Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria. .</u>  |
| <b>Expression :</b>           | <u>Colon,Fetal brain cortex,Placenta,</u>   |

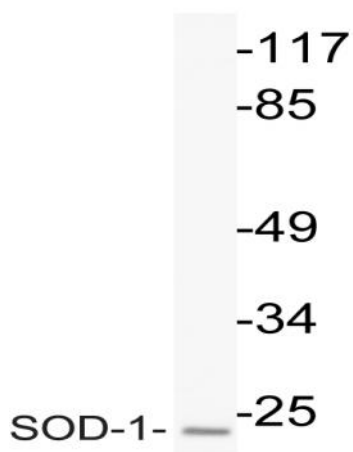
## Products Images



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.