

**Goat Anti-SOD1 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF2022a

**Specification**

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**Goat Anti-SOD1 Antibody - Product Information**

Application	WB, EIA
Primary Accession	<a href="#">P00441</a>
Other Accession	<a href="#">NP_000445</a> , <a href="#">6647</a> , <a href="#">20655 (mouse)</a> , <a href="#">24786 (rat)</a>
Reactivity	Human, Mouse, Rat
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	15936

**Goat Anti-SOD1 Antibody - Additional Information**

**Gene ID** 6647

**Other Names**

Superoxide dismutase [Cu-Zn], 1.15.1.1, Superoxide dismutase 1, hSod1, SOD1

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SOD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SOD1 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.

## Goat Anti-SOD1 Antibody - Protocols

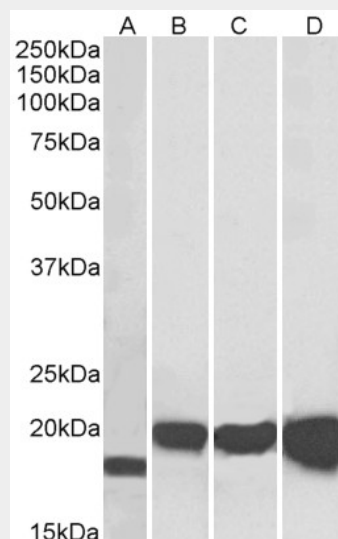
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

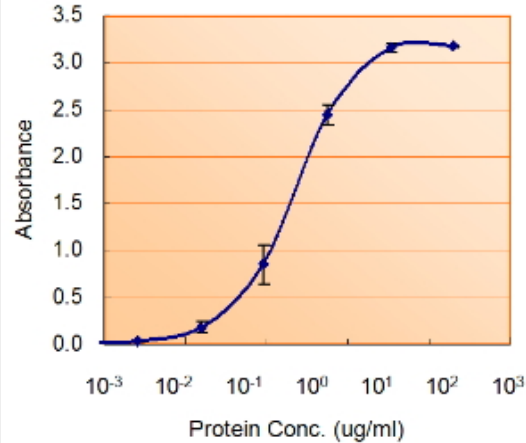
## Goat Anti-SOD1 Antibody - Images



AF2022a (0.02  $\mu\text{g/ml}$ ) staining of Mouse Brain lysate (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2022a (0.01  $\mu\text{g/ml}$ ) staining of NIH3T3 (A), HEK293 (B), HepG2 (C) and MCF7 (D) lysates (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2022a (1.5ug/ml) as the reporter with EB002010 as the capture rabbit antibody (5ug/ml).

### Goat Anti-SOD1 Antibody - Background

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.

### Goat Anti-SOD1 Antibody - References

Chromosome 9p21 in amyotrophic lateral sclerosis in Finland: a genome-wide association study. Laaksovirta H, et al. *Lancet Neurol*, 2010 Oct. PMID 20801718.  
Knock-down of superoxide dismutase 1 sensitizes cisplatin-resistant human ovarian cancer cells. Kim JW, et al. *Anticancer Res*, 2010 Jul. PMID 20682985.  
Genetics and clinical characteristics of keratoconus. Stabuc-Silih M, et al. *Acta Dermatovenerol Alp Panonica Adriat*, 2010. PMID 20664914.  
Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086.  
Mutant superoxide dismutase 1-induced IL-1beta accelerates ALS pathogenesis. Meissner F, et al. *Proc Natl Acad Sci U S A*, 2010 Jul 20. PMID 20616033.