

SOD1, Biotinylated

Peptide-affinity purified goat antibody

Catalog # AF2022b

Product Information

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| Application | WB, Pep-ELISA |
| Primary Accession | P00441 |
| Other Accession | NP_000445 , 6647 , 20655 (mouse) , 24786 (rat) |
| Reactivity | Human, Mouse, Rat |
| Predicted | Dog |
| Host | Goat |
| Clonality | Polyclonal |
| Isotype | IgG |
| Calculated MW | 15936 |

Additional Information

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| Gene ID | 6647 |
| Other Names | Superoxide dismutase [Cu-Zn], 1.15.1.1, Superoxide dismutase 1, hSod1, SOD1 |
| Dilution | WB~~1:1000 Pep-ELISA~~N/A |
| 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 | SOD1, Biotinylated is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| 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. |

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.

References

Chromosome 9p21 in amyotrophic lateral sclerosis in Finland: a genome-wide association study. Laaksovirta H, et al. *Lancet Neurol*, 2010 Oct. PMID 20801718.

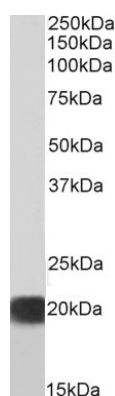
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Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086.

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.

Images



Biotinylated EB07208 (0.3 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer), exactly mirroring its parental non-biotinylated product. Primary incubation was 1 hour. Detected by chemiluminescence, using streptavidin-HRP and using NAP blocker as

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