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SOD1 Antibody

Rabbit mAb
Catalog # AP91097

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P00441
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ALS1; HEL S 44; Homodimer; hSod1; Indophenoloxidase A; IPOA; SOD1; SOD2; SODC;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	15936

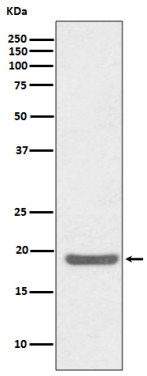
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SOD1
Description	SOD1, Cu/Zn superoxide dismutase, is a major antioxidant enzyme that catalyzes the conversion of superoxide anion to hydrogen peroxide and molecular oxygen. The mechanism by which mutant SOD1 induces the neurodegeneration observed in ALS is still unclear. Mutant SOD1 proteins become misfolded and consequently oligomerize into high molecular weight species that aggregate and end up in proteinaceous inclusions.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	SOD1 (HGNC:11179)
Function	Destroys radicals which are normally produced within the cells and which are toxic to biological systems (PubMed:18948262, PubMed:24140062). Catalyzes the oxidation of hydrogen sulfide (H2S) to sulfate, playing an important role in detoxifying H2S and limiting the accumulation of reactive sulfur species (RSS) such as persulfides and polysulfides (PubMed:36630448).
Cellular Location	Cytoplasm. Nucleus. Note=Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

Images



Western blot analysis of CD80 expression in Jurkat cell lysate.

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