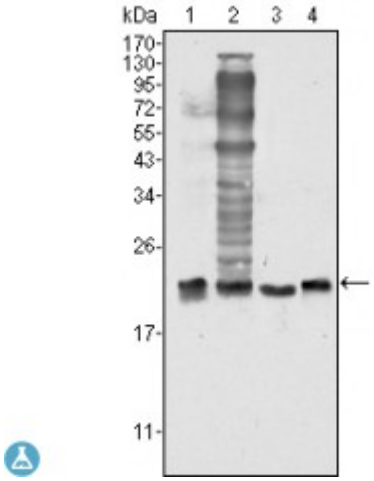
Anti-SOD-1 antibody



Description	Mouse monoclonal to SOD-1.

Model	STJ98392
Host	Mouse
Reactivity	Human, Mouse
Applications	ELISA, FC, IF, WB
Immunogen	Purified recombinant fragment of human SOD-1 expressed in E. Coli.
Gene ID	6647
Gene Symbol	SOD1
Dilution range	WB 1:500-1:2000IF 1:200-1:1000FC 1:200-1:400ELISA 1:10000
Specificity	SOD-1 Monoclonal Antibody detects endogenous levels of SOD-1 protein.
Purification	Affinity purification
Clone ID	6F5
Note	For Research Use Only (RUO).
Protein Name	Superoxide dismutase Cu-Zn Superoxide dismutase 1 hSod1
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Ascitic fluid containing 0.03% sodium azide.

Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11179OMIM:105400
Alternative Names	Superoxide dismutase Cu-Zn Superoxide dismutase 1 hSod1
Function	Destroys radicals which are normally produced within the cells and which are toxic to biological systems.
Cellular Localization	Cytoplasm Mitochondrion Nucleus. Predominantly cytoplasmic. the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.
Post-translational Modifications	Unlike wild-type protein, the pathogenic variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 are polyubiquitinated by RNF19A leading to their proteasomal degradation. The pathogenic variants ALS1 Arg-86 and Ala-94 are ubiquitinated by MARCH5 leading to their proteasomal degradation. The ditryptophan cross-link at Trp-33 is responsible for the non-disulfide-linked homodimerization. Such modification might only occur in extreme conditions and additional experimental evidence is required. Palmitoylation helps nuclear targeting and decreases catalytic activity. Succinylation, adjacent to copper catalytic site, probably inhibits activity. Desuccinylation by SIRT5 enhances activity.