

Human SOD1 ELISA Kit | SOD1 elisa kit

Human SOD1 ELISA Kit

CATALOG # AAA261723	REACTIVITY Human	APPLICATIONS ELISA
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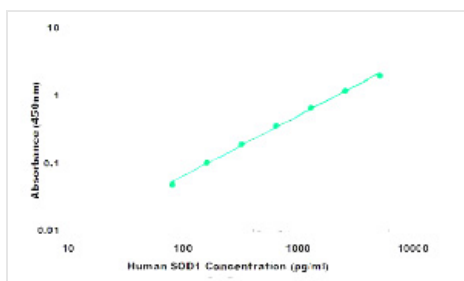
PRODUCT SYNONYMS

SOD1; Human SOD1 ELISA Kit; Superoxide dismutase [Cu-Zn]; Superoxide dismutase 1; hSod1; SOD1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	The Human SOD1 ELISA Kit allows for the detection and quantification of endogenous levels of natural and/or recombinant Human SOD1 proteins within the range of 78 pg/ml - 5000 pg/ml.
Sequence Length	154
Samples	Serum, plasma
Sensitivity	Typically less than 40 pg/ml.
Applicable Applications for SOD1 elisa kit	ELISA (Sandwich ELISA)
Preparation and Storage	Shipped and store at 4 degree C for 6 months, store at -20 degree C for one year. Avoid freeze/thaw cycles.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for SOD1 elisa kit	Principle of the Assay: The Human SOD1 ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of Human SOD1 in Cell Culture Supernatants, Serum, Plasma. This assay employs an antibody specific for Human SOD1 coated on a 96-well plate. Standards and samples are pipetted into the wells and SOD1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human SOD1 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of SOD1 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm. Background/Introduction: Cu-Zn superoxide dismutase-1 (SOD-1) is a well characterized cytosolic scavenger of oxygen free radicals that requires copper and zinc binding to potentiate its enzymatic activity. Enzymatically, SOD-1 facilitates the dismutation of oxygen radicals to hydrogen peroxide and also catalyzes pro-oxidant reactions, which include the peroxidase activity and hydroxyl radical generating activity. SOD-1 is ubiquitously expressed in somatic cells and functions as a homodimer. Defects in the gene encoding SOD-1 have been implicated in the progression of neurological diseases, including amyotrophic lateral sclerosis (ALS), a neurodegenerative disease characterized by the loss of spinal motor neurons, Down syndrome and Alzheimer's disease. In familial ALS, several mutations in SOD-1 predominate, resulting in the loss of zinc binding, the loss of scavenging activity of SOD-1, and correlate with an increase in neurotoxicity and motor neuron death.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	134611
NCBI GeneID	6647
UniProt Accession #	P00441; Q16669; Q16711; Q16838; Q16839; Q16840; Q6NR85; A6NHJ0; D3DSE4
Molecular Weight	15,936 Da
NCBI Official Full Name	Superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 1, soluble
NCBI Official Symbol	SOD1
NCBI Official Synonym Symbols	ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer
NCBI Protein Information	superoxide dismutase [Cu-Zn]
UniProt Protein Name	Superoxide dismutase [Cu-Zn]
UniProt Gene Name	SOD1
UniProt Synonym Gene Names	hSod1
UniProt Entry Name	SODC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.