



Rat superoxide dismutase 1, soluble (SOD1) ELISA kit

Product Code	CSB-EL022397RA
Abbreviation	SOD1
Target Name	superoxide dismutase 1, soluble
Uniprot No.	P07632
Alias	ALS, ALS1, IPOA, SOD, homodimer, Cu/Zn superoxide dismutase SOD, soluble indophenoxidase A superoxide dismutase, cystolic
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Metabolism
Gene Names	Sod1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat SOD1 ELISA Kit was designed for the quantitative measurement of Rat SOD1 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL.
Target Details	This protein 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.
Product Precision	Intra-assay Precision (Precision within an assay): CV%<8%



Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat SOD1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:200	Average %	93
	Range %	88-95
1:400	Average %	104
	Range %	100-107
1:800	Average %	92
	Range %	87-95
1:1600	Average %	97
	Range %	92-100

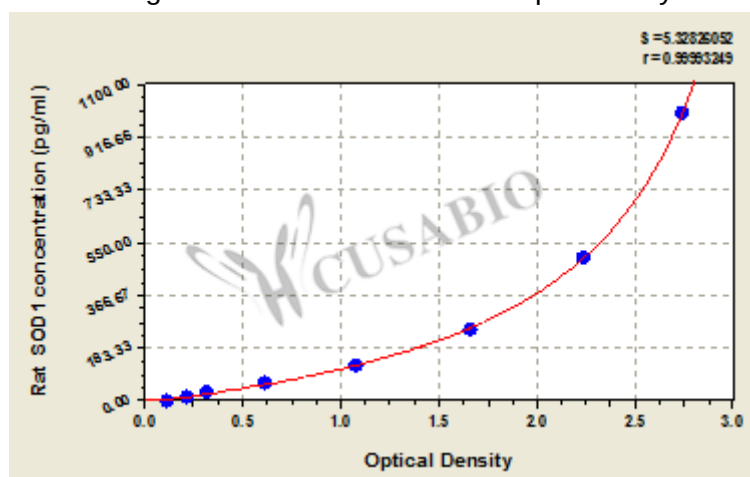
Recovery

The recovery of rat SOD1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	93	89-95
EDTA plasma (n=4)	95	92-97

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
1000	2.774	2.767	2.771	2.638
500	2.226	2.305	2.266	2.133
250	1.737	1.624	1.681	1.548
125	1.108	1.088	1.098	0.965
62.5	0.636	0.628	0.632	0.499
31.2	0.339	0.321	0.330	0.197
15.6	0.231	0.224	0.228	0.095
0	0.130	0.136	0.133	?

**Msd**

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