Human Extracellular superoxide dismutase [Cu-Zn](SOD3) ELISA kit

Product Code	CSB-EL022399HU
Abbreviation	SOD3
Target Name	superoxide dismutase 3, extracellular
Uniprot No.	P08294
Alias	EC-SOD, MGC20077
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates, saliva, urine
Detection Range	7.8 pg/mL-500 pg/mL
Sensitivity	1.95 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	SOD3
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human SOD3 ELISA Kit was designed for the quantitative measurement of Human SOD3 protein in serum, plasma, cell culture supernates, tissue homogenates, saliva, urine. It is a Sandwich ELISA kit, its detection range is 7.8 pg/mL-500 pg/mL and the sensitivity is 1.95 pg/mL.
Target Details	This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide radicals into hydrogen peroxide and oxygen. The product of this gene is thought to protect the brain, lungs, and other tissues from oxidative stress. The protein is secreted into the extracellular space and forms a glycosylated homotetramer that is anchored to the extracellular matrix (ECM) and cell surfaces through an interaction with heparan sulfate proteoglycan and collagen. A fraction of the protein is cleaved near the C-terminus before secretion to generate circulating tetramers that do not interact with the ECM.
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 human SOD3 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)
1:1000	Average %	90
	Range %	82-96
1:2000	Average %	95
	Range %	90-102
1:4000	Average %	98
	Range %	92-105
1:8000	Average %	87
	Range %	83-93

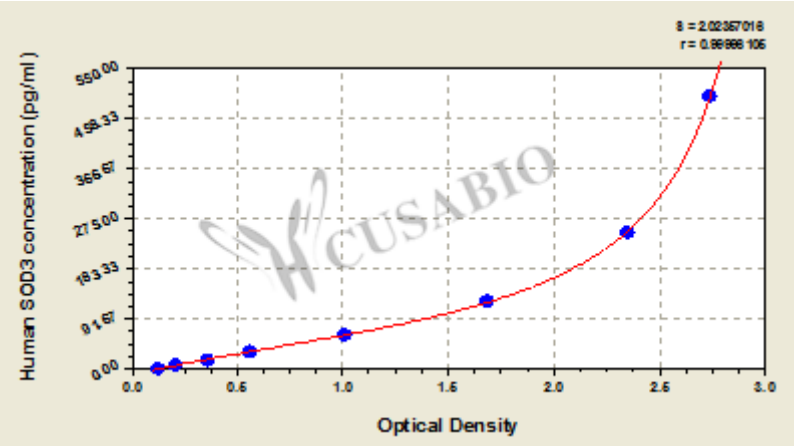
Recovery

The recovery of human SOD3 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)	90	87-96
EDTA plasma (n=4)	95	92-102

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
500	2.772	2.747	2.760	2.624
250	2.349	2.379	2.364	2.228
125	1.712	1.694	1.703	1.567
62.5	1.056	0.993	1.025	0.889
31.2	0.591	0.552	0.572	0.436
15.6	0.372	0.364	0.368	0.232
7.8	0.225	0.217	0.221	0.085
0	0.134	0.138	0.136	?

Msds	{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL022399HU.pdf","filename":"MSDS"}}