



# Bovine Cu/Zn-Superoxide Dismutase, Cu/Zn-SOD ELISA Kit

Product Code	CSB-E14090B
Abbreviation	SOD1
Target Name	superoxide dismutase 1, soluble
Uniprot No.	P00442
Alias	ALS, ALS1, IPOA, SOD, homodimer, Cu/Zn superoxide dismutase SOD, soluble indophenoloxidase A superoxide dismutase, cytosolic
Product Type	ELISA Kit
Immunogen Species	Bos taurus (Bovine)
Sample Types	serum, plasma
Detection Range	15.6 ng/mL-1000 ng/mL
Sensitivity	3.9 ng/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	<p>This Bovine SOD1 ELISA Kit was designed for the quantitative measurement of Bovine SOD1 protein in serum, plasma. It is a Sandwich ELISA kit, its detection range is 15.6 ng/mL-1000 ng/mL and the sensitivity is 3.9 ng/mL.</p>
Target Details	<p>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.</p>
Product Precision	<p>Intra-assay Precision (Precision within an assay): CV%&lt;8%</p> <p>Three samples of known concentration were tested twenty times on one plate to assess.</p>



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 bovine Cu/Zn-SOD 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)
1:1	Average %	97
	Range %	92-104
1:2	Average %	91
	Range %	85-97
1:4	Average %	90
	Range %	88-95
1:8	Average %	100
	Range %	96-105

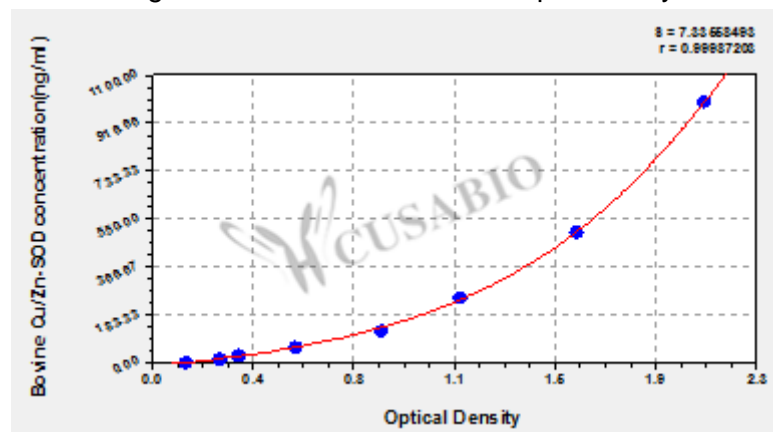
## Recovery

The recovery of bovine Cu/Zn-SOD 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	87-94
EDTA plasma (n=4)	101	103-105

## Typical

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



ng/ml	OD1	OD2	Average	Corrected
1000	2.014	2.115	2.065	1.929
500	1.537	1.640	1.589	1.453
250	1.201	1.108	1.155	1.019
125	0.878	0.844	0.861	0.725
62.5	0.541	0.555	0.548	0.412
31.2	0.342	0.329	0.336	0.200
15.6	0.251	0.272	0.262	0.126
0	0.137	0.135	0.136	

## Msds

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