



Mouse Superoxide dismutase [Mn], mitochondrial(SOD2) ELISA kit

Product Code	CSB-EL022398MO
Abbreviation	SOD2
Target Name	superoxide dismutase 2, mitochondrial
Uniprot No.	P09671
Alias	IPO-B, MNSOD, MVCD6, Mn-SOD, Mn superoxide dismutase indophenoloxidase B manganese-containing superoxide dismutase mangano-superoxide dismutase
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.625 ng/mL-40 ng/mL
Sensitivity	0.156 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	Sod2
Tag Info	quantitative
Protein Description	Sandwich

Description	This Mouse SOD2 ELISA Kit was designed for the quantitative measurement of Mouse SOD2 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.625 ng/mL-40 ng/mL and the sensitivity is 0.156 ng/mL.
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Target Details	This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.
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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 mouse SOD2 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 %	95
	Range %	86-98
1:2	Average %	100
	Range %	97-104
1:4	Average %	89
	Range %	85-93
1:8	Average %	95
	Range %	91-100

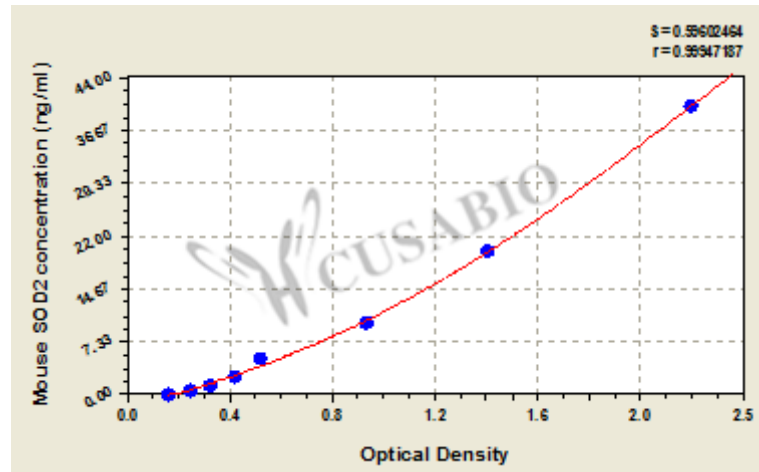
Recovery

The recovery of mouse SOD2 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)	91	85-95
EDTA plasma (n=4)	101	90-105

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
40	2.292	2.202	2.247	2.064
20	1.415	1.476	1.446	1.263
10	0.956	0.978	0.967	0.784
5	0.548	0.539	0.544	0.361
2.5	0.448	0.441	0.445	0.262
1.25	0.342	0.357	0.350	0.167
0.625	0.275	0.266	0.271	0.088
0	0.182	0.184	0.183	

Msds

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