Mouse Phospholipid hydroperoxide glutathione peroxidase, mitochondrial(GPX4) ELISA kit

Product Code	CSB-EL009869MO
Abbreviation	GPX4
Target Name	glutathione peroxidase 4 (phospholipid hydroperoxidase)
Uniprot No.	Q91XR9
Alias	MCSP, PHGPx, snGPx, snPHGPx, glutathione peroxidase 4|phospholipid hydroperoxidase|phospholipid hydroperoxide glutathione peroxidase, mitochondrial|sperm nucleus glutathione peroxidase
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	31.25 pg/mL-2000 pg/mL
Sensitivity	7.81 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	Cancer
Gene Names	Gpx4
Tag Info	quantitative
Protein Description	Sandwich
Description	This Mouse GPX4 ELISA Kit was designed for the quantitative measurement of Mouse GPX4 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.81 pg/mL.
Target Details	Glutathione peroxidase catalyzes the reduction of hydrogen peroxide, organic hydroperoxide, and lipid peroxides by reduced glutathione and functions in the protection of cells against oxidative damage. Human plasma glutathione peroxidase has been shown to be a selenium-containing enzyme and the UGA codon is translated into a selenocysteine. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, experimental evidence for alternative splicing exists; alternative transcription initiation and the cleavage sites of the

mitochondrial and nuclear transit peptides need to be experimentally verified.

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 GPX4 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 %	90
	Range %	86-95
1:2	Average %	100
	Range %	97-104
1:4	Average %	94
	Range %	85-97
1:8	Average %	98
	Range %	91-103

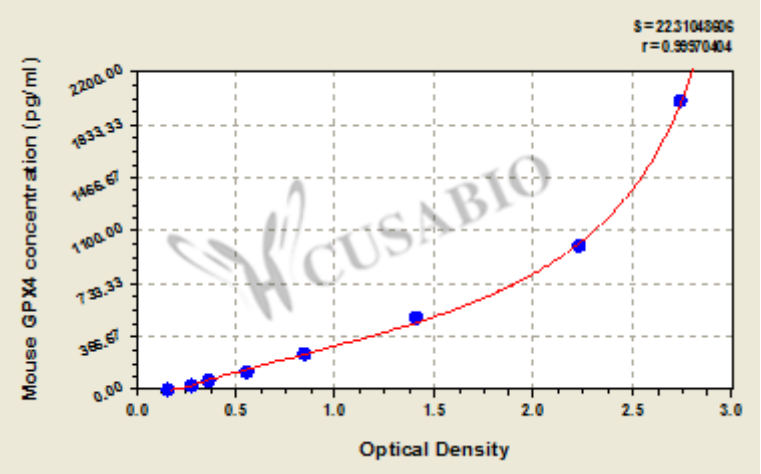
Recovery

The recovery of mouse GPX4 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)	95	89-98
EDTA plasma (n=4)	92	87-98

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
2000	2.746	2.675	2.711	2.539
1000	2.218	2.189	2.204	2.032
500	1.392	1.412	1.402	1.230
250	0.854	0.834	0.844	0.672
125	0.571	0.553	0.562	0.390
62.5	0.376	0.368	0.372	0.200
31.25	0.283	0.289	0.286	0.114
0	0.171	0.173	0.172	

Msds

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