



Mouse Protein disulfide-isomerase(P4HB) ELISA kit

Product Code	CSB-EL017342MO
Abbreviation	P4HB
Target Name	prolyl 4-hydroxylase, beta polypeptide
Uniprot No.	P09103
Alias	DSI, ERBA2L, GIT, P4Hbeta, PDI, PDIA1, PHDB, PO4DB, PO4HB, PROHB, collagen prolyl 4-hydroxylase beta[glutathione-insulin transhydrogenase]procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 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	Cancer
Gene Names	P4hb
Tag Info	quantitative
Protein Description	Sandwich

Description

This Mouse P4HB ELISA Kit was designed for the quantitative measurement of Mouse P4HB protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 ng/mL.

Target Details

This gene encodes the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, this enzyme is involved in hydroxylation of prolyl residues in procollagen. This enzyme is also a disulfide isomerase containing two thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Other known functions include its ability to act as a chaperone that inhibits aggregation of misfolded proteins in a concentration-dependent manner, its ability to bind



thyroid hormone, its role in both the influx and efflux of S-nitrosothiol-bound nitric oxide, and its function as a subunit of the microsomal triglyceride transfer protein complex.

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 P4HB 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 %	94
	Range %	87-98
1:2	Average %	103
	Range %	96-108
1:4	Average %	92
	Range %	85-97
1:8	Average %	101
	Range %	95-107

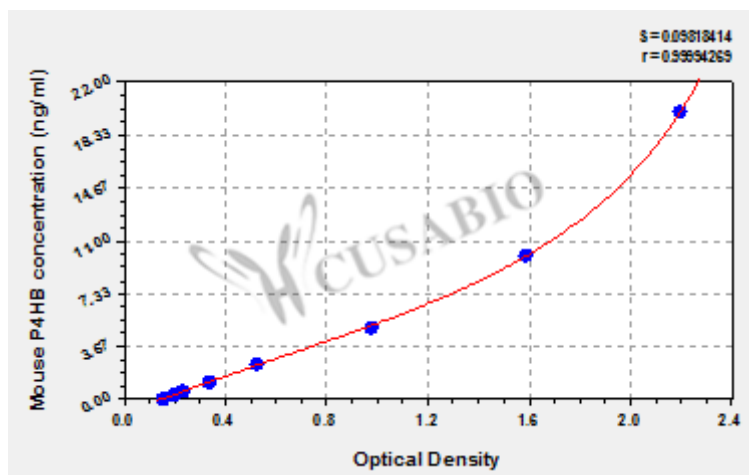
Recovery

The recovery of mouse P4HB 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)	89	84-95
EDTA plasma (n=4)	99	91-105

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
20	2.248	2.175	2.212	2.044
10	1.615	1.584	1.600	1.432
5	1.016	0.967	0.992	0.824
2.5	0.545	0.536	0.541	0.373
1.25	0.342	0.358	0.350	0.182
0.625	0.251	0.243	0.247	0.079
0.312	0.215	0.210	0.213	0.045
0	0.171	0.165	0.168	?

Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL017342MO.pdf",
    "filename": "MSDS"
  }
}
```