



Mouse parathyroid hormone (PTH) ELISA kit

Product Code	CSB-E08690m
Abbreviation	PTH
Target Name	parathyroid hormone (PTH)
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, tissue homogenates
Detection Range	6.25 pg/mL-400 pg/mL
Sensitivity	1.56 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	Signal Transduction
Tag Info	quantitative
Protein Description	Sandwich

Description

The product CSB-E08690m is a sandwich ELISA kit developed to measure levels of mouse parathyroid hormone (PTH) in serum or tissue homogenates. The enzyme-substrate chromogenic reaction is also used to amplify the signal and quantify the levels of the analyte through the intensity of the colored product. The color intensity positively correlates with the amount of PTH bound in the initial step.

PTH is a polypeptide synthesized and secreted by the parathyroid gland in response to low calcium levels detected in the blood. PTH promotes the production of active vitamin D and calcitriol (1,25-dihydroxycholecalciferol) in the kidneys. In conjunction with calcitriol, PTH regulates calcium and phosphate. PTH effects are present in the bones, kidneys, and small intestines. When serum calcium levels decrease, the secretion of PTH by the parathyroid gland elevates. Increased calcium levels in the serum serve as a negative-feedback loop signaling the parathyroid glands to stop the release of PTH.

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 PTH 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 %	87-99
1:2	Average %	100
	Range %	96-104
1:4	Average %	90
	Range %	84-94
1:8	Average %	96
	Range %	89-100

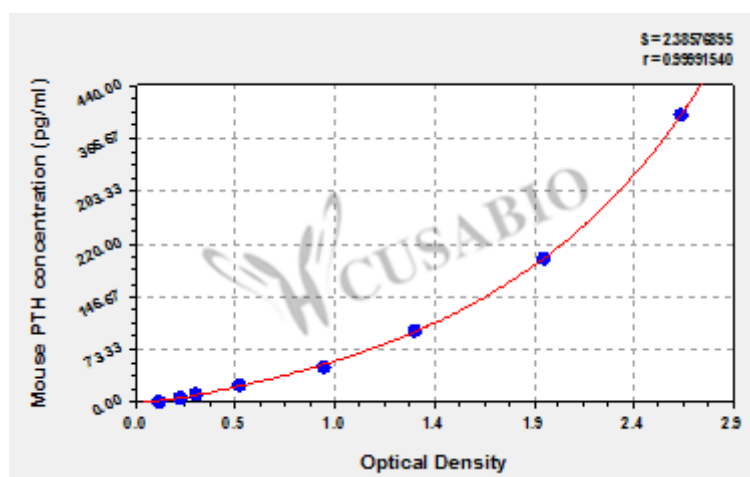
Recovery

The recovery of mouse PTH 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	84-95
EDTA plasma (n=4)	104	97-110

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
400	2.670	2.584	2.627	2.507
200	1.997	1.937	1.967	1.847
100	1.360	1.339	1.350	1.230
50	0.931	0.900	0.916	0.796
25	0.514	0.501	0.508	0.388
12.5	0.306	0.298	0.302	0.182
6.25	0.224	0.221	0.223	0.103
0	0.122	0.118	0.120	?



Msd

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