



Rat fibroblast growth factor 23 (FGF23) ELISA Kit

Product Code	CSB-E12170r
Abbreviation	FGF23
Protein Biological Process 1	Developmental Protein
Target Name	fibroblast growth factor 23
Uniprot No.	Q8VI82
Alias	ADHR, HPDR2, HYPF, PHPTC, tumor-derived hypophosphatemia inducing factor
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Differentiation
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	1.56 pg/mL-100 pg/mL
Sensitivity	0.39 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
Gene Names	Fgf23
Tag Info	quantitative
Protein Description	Sandwich

Description	This Rat FGF23 ELISA Kit was designed for the quantitative measurement of Rat FGF23 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.56 pg/mL-100 pg/mL and the sensitivity is 0.39 pg/mL .
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Target Details	This protein is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. The product of this gene inhibits renal tubular phosphate transport. This gene was identified by its mutations associated with autosomal dominant hypophosphatemic rickets (ADHR), an inherited phosphate wasting disorder. Abnormally high level
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expression of this gene was found in oncogenic hypophosphatemic osteomalacia (OHO), a phenotypically similar disease caused by abnormal phosphate metabolism. Mutations in this gene have also been shown to cause familial tumoral calcinosis with hyperphosphatemia.

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 rat FGF23 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)
1:20	Average %	90
	Range %	86-94
1:40	Average %	97
	Range %	91-101
1:80	Average %	84
	Range %	80-88
1:160	Average %	92
	Range %	87-96

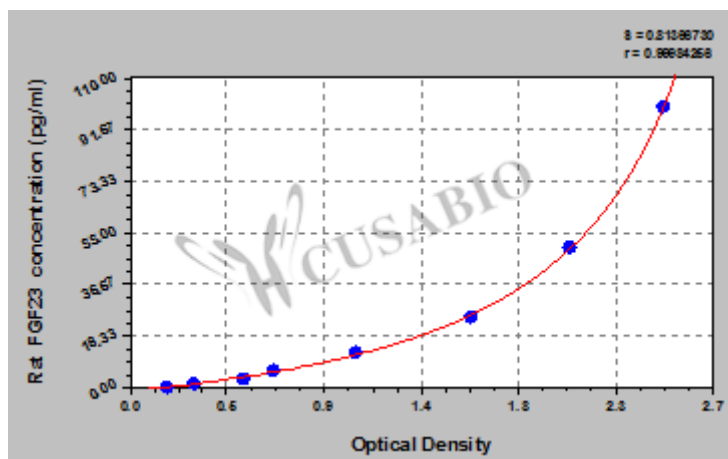
Recovery

The recovery of rat FGF23 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)	96	90-102
EDTA plasma (n=4)	94	90-99

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	
100	2.532	2.431	2.482	2.291
50	2.089	2.012	2.051	1.860
25	1.614	1.573	1.594	1.403
12.5	1.098	1.027	1.063	0.872
6.25	0.658	0.705	0.682	0.491
3.12	0.527	0.553	0.540	0.349
1.56	0.307	0.316	0.312	0.121
0	0.184	0.197	0.191	?

Msd

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