

Datasheet for ABIN2859231  
**FGF23 ELISA Kit**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	96 tests
Target:	FGF23
Binding Specificity:	AA 25-251
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse FGF23
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: Y25-V251
Specificity:	E.coli, Y25-V251
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

## Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl
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## Target Details

Target:	FGF23
Alternative Name:	FGF23 ( <a href="#">FGF23 Products</a> )
Background:	<p>Protein Function: Regulator of phosphate homeostasis (By similarity). Inhibits renal tubular phosphate transport by reducing SLC34A1 levels (By similarity). Acts directly on the parathyroid to decrease PTH secretion (By similarity). Regulator of vitamin-D metabolism (By similarity). Negatively regulates osteoblasts differentiation and matrix mineralization (By similarity). Upregulates EGR1 expression in the presence of KL. .</p> <p>Background: Fibroblast growth factor 23 or FGF23 is a protein that in humans is encoded by the FGF23 gene. It is a member of the fibroblast growth factor (FGF) family which is responsible for phosphate metabolism. The main function of FGF23 seems to be regulation of phosphate concentration in plasma. FGF23 is secreted by Osteocytes in response to elevated Calcitriol. And it acts on the kidneys, where it decreases the expression of NPT2, a sodium-phosphate cotransporter in the proximal tubule. Thus, FGF23 decreases the reabsorption and increases excretion of phosphate. Also, FGF23 may suppress 1-alpha-hydroxylase, reducing its ability to activate vitamin D and subsequently impairing calcium absorption.</p> <p>Synonyms: Fibroblast growth factor 23,FGF-23,Fgf23,</p> <p>Full Gene Name: Fibroblast growth factor 23</p> <p>Cellular Localisation: Secreted . Secretion is dependent on O-glycosylation..</p>
Gene ID:	64654
UniProt:	<a href="#">Q9EPC2</a>
Pathways:	<a href="#">RTK Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Negative Regulation of Hormone Secretion</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Mainly expressed in the brain and thymus at low levels. In brain, preferentially

## Application Details

expressed in the ventrolateral thalamic nucleus.

Plate: Pre-coated

Protocol: mouse FGF23 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for FGF23 has been precoated onto 96-well plates. Standards(E.coli, Y25-V251) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for FGF23 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse FGF23 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL mouse FGF23 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse FGF23 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 37.7, Standard deviation: 1.39, CV(%): 3.7
- Sample 2: n=16, Mean(pg/ml): 118, Standard deviation: 5.43, CV(%): 4.6
- Sample 3: n=16, Mean(pg/ml): 621, Standard deviation: 32.91, CV(%): 5.3,
- Sample 1: n=24, Mean(pg/ml): 38.2, Standard deviation: 2.56, CV(%): 6.7
- Sample 2: n=24, Mean(pg/ml): 128, Standard deviation: 8.70, CV(%): 6.8
- Sample 3: n=24, Mean(pg/ml): 642, Standard deviation: 49.43, CV(%): 7.7

Restrictions: For Research Use only

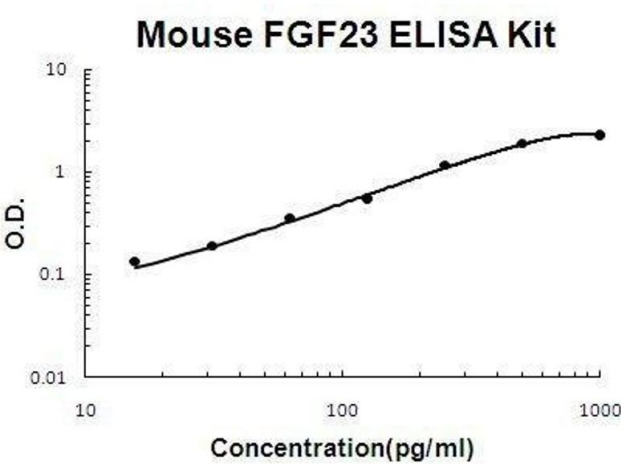
## Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months



**ELISA**

**Image 1.** Mouse FGF23 PicoKine ELISA Kit standard curve