

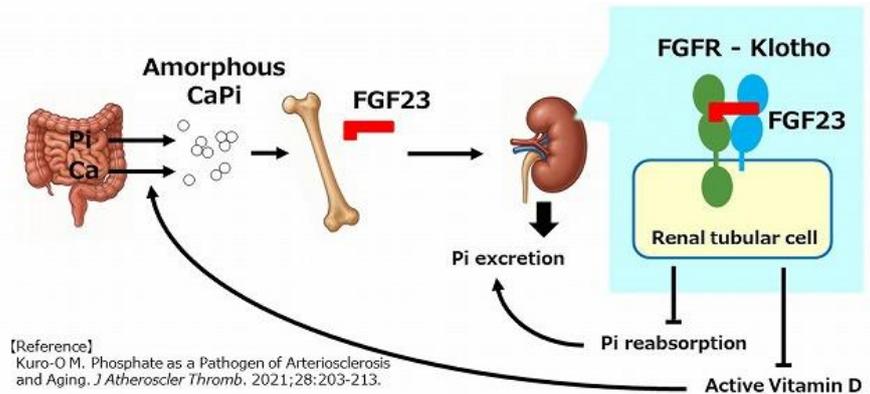
**New Release!**

Product Code	Product Name	Package Size	Measurement Range (pg/mL)	Sample Type	Measuring Sample
27266	Human FGF23 ELISA Kit - IBL	96 Well	15.63 - 1,000	Human	Serum, EDTA-Plasma



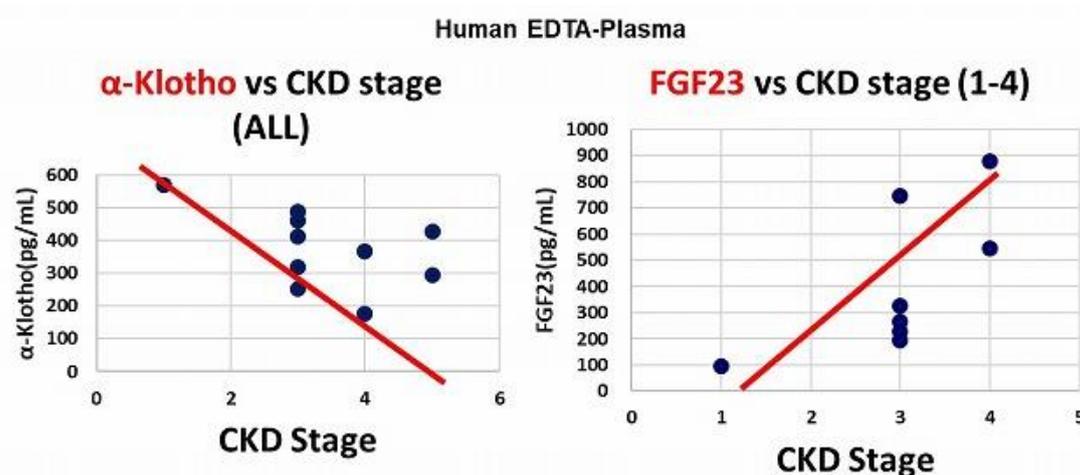
## FGF23

is a hormone that lowers serum phosphate levels by acting on the Klotho-FGFR complex, inhibiting phosphate reabsorption in the renal proximal tubules and suppressing intestinal phosphate absorption by reducing circulating levels of active vitamin D.



In chronic kidney disease (CKD), FGF23 levels are known to increase as kidney function declines to prevent phosphate accumulation. As CKD progresses, the ability of FGF23 and parathyroid hormone (PTH) to suppress phosphate reabsorption reaches its limit, thus increasing the risk of hyperphosphatemia and secondary hyperparathyroidism. Therefore, measuring FGF23 levels is important for studying CKD and secondary hyperparathyroidism. It is also considered useful for researching bone-related disorders such as hypophosphatemic rickets and osteomalacia.

### Negative Correlation ( $\alpha$ -Klotho vs FGF23) in CKD



Data provided by Dr. Yuji Muraba, Cardiology, Hidaka Hospital

#### Related Products

- [#27996 Human FGF19 Assay Kit - IBL](#)
- [#27997 Human FGF21 Assay Kit - IBL](#)

- [#27901 Human secreted  \$\alpha\$ -Klotho Assay Kit - IBL](#)
- [#27998 Human soluble  \$\alpha\$ -Klotho Assay Kit - IBL](#)
- [#27601 Mouse soluble  \$\alpha\$ -Klotho Assay Kit - IBL](#)

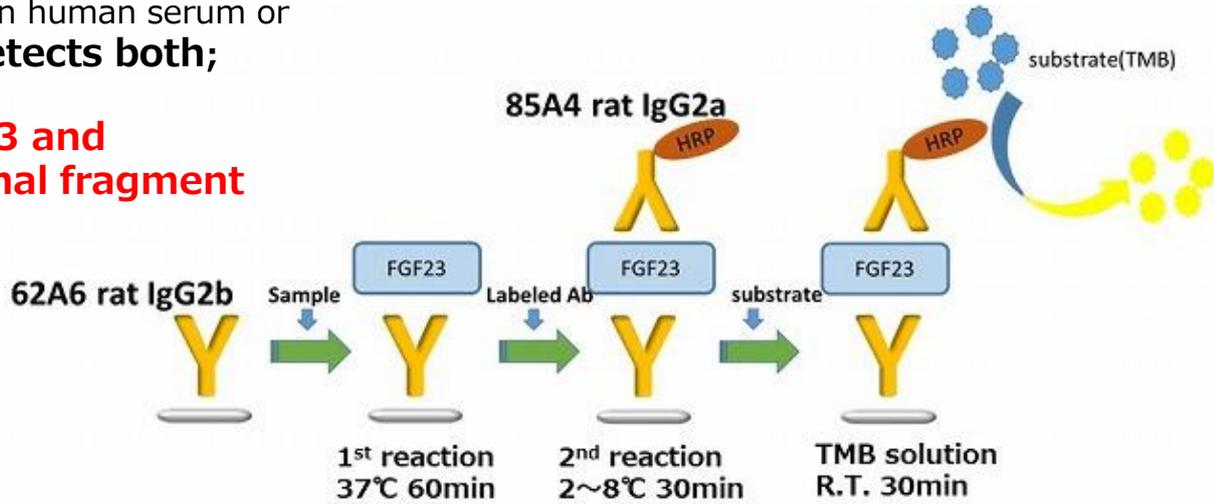
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# PRINCIPLE AND FETATURE

This product is an ELISA kit for quantifying FGF23 in human serum or EDTA plasma. It **detects both**;

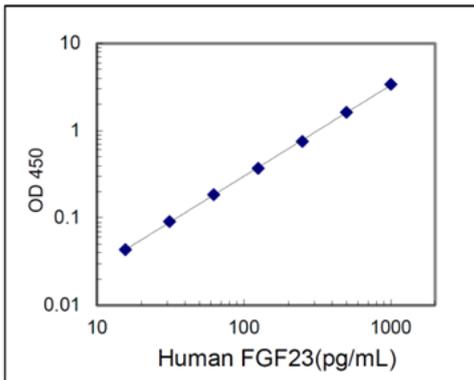
- Research Use Only-

- ✓ Intact FGF23 and
- ✓ the C-terminal fragment



## PERFORMANCE AND CHARACTERISTICS

### Example of standard curve



Standard curve should run for each assay.

### Sensitivity

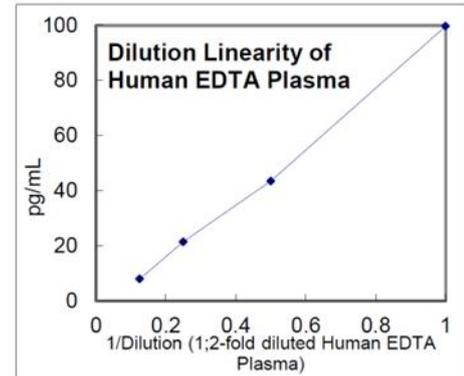
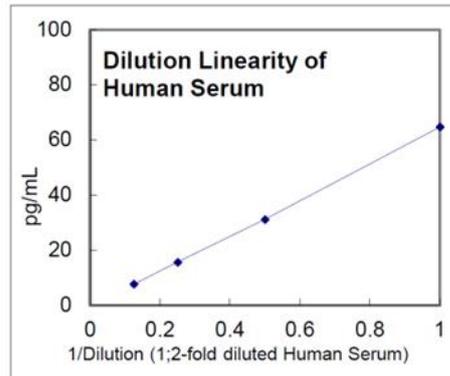
3.63 pg/mL

(Calculated by NCCLS method using the standard.)

### Measurement range

15.63 ~ 1,000 pg/mL

### Dilution linearity



### Specificity

Substance	Cross reactivity (%)
Human FGF19	≤0.1
Human FGF21	≤0.1
Human soluble α-Klotho	≤0.1

### Intra-assay

Measurement Value (pg/mL)	SD (pg/mL)	CV (%)	n
688.11	20.95	3.0	24
199.22	8.29	4.2	24
90.56	5.75	6.3	24

### Inter-assay

Measurement Value (pg/mL)	SD (pg/mL)	CV (%)	n
728.77	40.85	5.6	7
196.77	8.18	4.2	7
90.22	7.78	8.6	7

### Spike recovery assay

Specimen	Additive Amount (pg/mL)	Theoretical Value (pg/mL)	Measurement Value (pg/mL)	%
Human Serum (x2)	337.65	406.55	372.86	91.7
	174.38	243.28	231.54	95.2
	85.57	154.47	156.21	101.1
	44.29	113.19	112.51	99.4
Human EDTA Plasma (x2)	345.36	438.14	320.11	73.1
	168.18	260.95	211.00	80.9
	89.97	182.74	164.05	89.8
	45.84	138.61	136.93	98.8