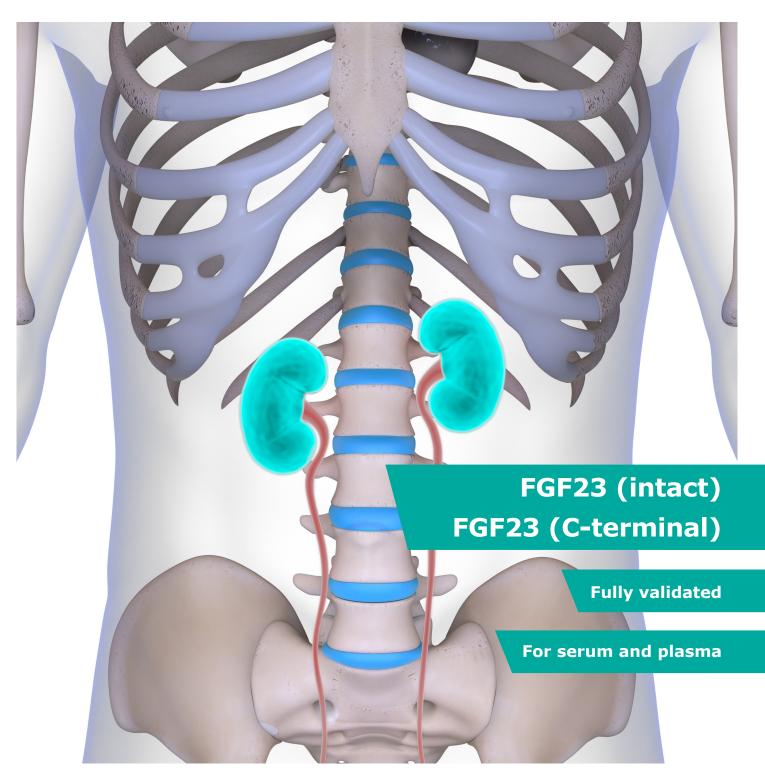
FGF23 ELISA KITS





Setting the standard for clinical research.



ELISA for the quantitative determination of human FGF23 (intact)

Features and Benefits

- RELIABLE fully validated for plasma according to ICH Q2 guidelines
- FAST ONE-STEP ELISA only 3.5 h total incubation time
- BIOLOGICALLY RELIABLE DATA plasma based standards & controls
- HIGH SPECIFICITY and SENSITIVITY characterized antibodies
- COMPARABLE RESULTS correlates with existing methods

Assay Characteristics

Method Sandwich ELISA, 12x8 well-strips

• Sample type Plasma (EDTA, heparin, citrate), serum, urine, cell culture *

Sample volume
Incubation
Standard range
50 µl / well
2 h / 1 h / 30 min
0 - 1600 pg/ml

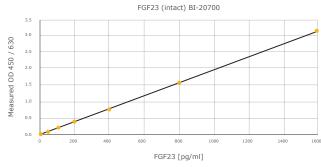
• Sensitivity 5.4 pg/ml (= 0.21 pmol/l)

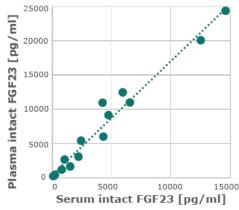
• Conversion factor 1 pmol/l = 26 pg/ml (MW: 26 kDa)

• Specificity Endogenous and recombinant human intact FGF23

Precision In-between-run (n=9): ≤ 6% CV, within-run (n=3): ≤ 8% CV

Typical Standard Curve





FGF23 (intact) Levels in Serum and Plasma

n=22	Median intact FGF23 [pg/ml]
EDTA plasma	24.9
Heparin plasma	26.4
Citrate plasma	17.4
Serum	14.8

High correlation of FGF23 (intact) values between serum and plasma samples

Intact FGF23 (iFGF23) levels measured in serum and plasma samples from chronic kidney disease (CKD) patients (n=16) are highly correlated (R= 0.9835).

Accuracy

Matrix	n	Mean S/R [%]		
Matrix		+160 pg/ml	+800 pg/ml	
Serum	6	70	91	
EDTA plasma	6	94	100	
Heparin plasma	1	82	79	
Citrate plasma	1	97	103	

Parallelism

Matrix	n	R of dilution steps [%]			
		1+1	1+3	1+7	
Serum	6	87	74	67	
EDTA plasma	5	107	108	111	
Heparin plasma	1	99	97	107	
Citrate plasma	1	143	137	130	

^{*}This ELISA is optimized and validated for human plasma samples. Serum, urine and cell culture supernatant are compatible with this ELISA. More information and full validation report are available at www.bmgrp.com

ELISA for the quantitative determination of human FGF23 (C-terminal)

Features and Benefits

- RELIABLE fully validated for plasma and serum according to ICH Q2 guidelines
- HIGHLY SENSITIVE clear differentiation even at low serum FGF23 levels
- BIOLOGICALLY RELIABLE DATA serum based standards & controls
- HIGH SPECIFICITY characterized antibodies
- COMPARABLE RESULTS correlates with existing methods

Assay Characteristics

• Method Sandwich ELISA, 12x8 well-strips

• Sample type Plasma (EDTA, heparin, citrate), serum, urine, cell culture *

Sample volume 50 μl / well

• Incubation 20-24 h / 1 h / 30 min

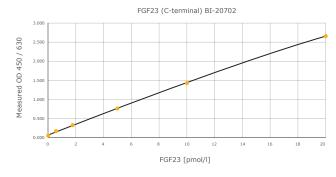
Standard range 0 - 20 pmol/l (= 150.4 pg/ml)
Sensitivity 0.08 pmol/l (= 0.6 pg/ml)

• Conversion factor 1 pmol/l = 7.52 pg/ml (MW: 7.52 kDa)

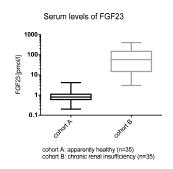
Specificity
Human FGF23 (intact and C-terminal fragments of endogenous and recombinant human FGF23)

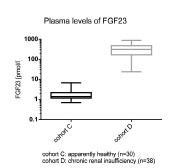
Precision In-between (n=10): ≤ 10% CV; within-run (n=6): ≤ 12% CV

Typical Standard Curve



FGF23 (C-terminal) Levels in Serum and Plasma





Accuracy

Matrix	n	Mean S/R [%]		
Matrix	- 11	+5 pmol/l	+10 pmol/l	
Serum	13	96	89	
EDTA plasma	7	97	94	
Heparin plasma	8	101	92	
Citrate plasma	7	100	90	

Parallelism

Matrix	n	R of dilution steps [%]			
		1+1	1+3	1+7	
Serum	9	105	100	108	
EDTA plasma	4	103	103	106	
Heparin plasma	10	102	106	104	
Citrate plasma	5	102	106	101	

Specificity

The assay measures both intact FGF23 and C-terminal fragments of FGF23.

The FGF23 detected in this assay is stable after sample collection. The assay can be used for all sample types.

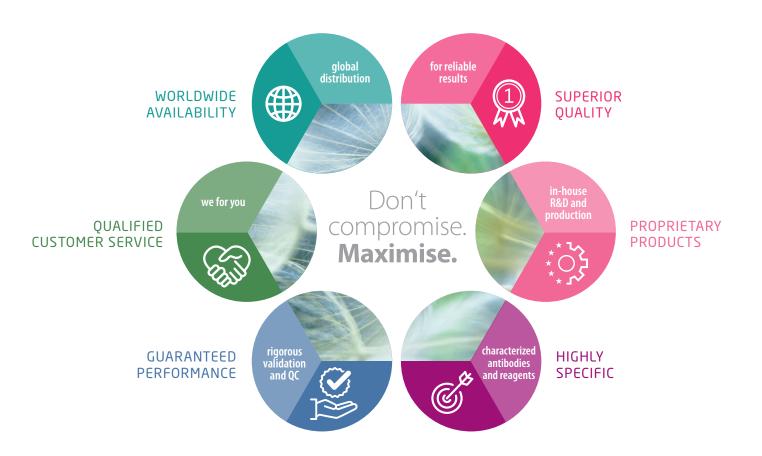
Related Biomedica Products

- Sclerostin ELISA, Cat.No. BI-20492
- DKK-1 ELISA, Cat.No. BI-20413

- FREE soluble RANKL ELISA, Cat.No. BI-20462
- Osteoprotegerin ELISA, Cat.No. BI-20403

^{*}This ELISA is optimized and validated for human plasma and serum samples. Urine and cell culture supernatant are compatible with this ELISA. More information and full validation report are available at www.bmgrp.com

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