



Human Fibroblast growth factor 19(FGF19) ELISA kit

Product Code	CSB-EL008624HU
Abbreviation	FGF19
Target Name	fibroblast growth factor 19
Uniprot No.	O95750
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	25 pg/mL-1600 pg/mL
Sensitivity	6.25 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	FGF19
Tag Info	quantitative
Protein Description	Sandwich

Description

The human FGF19 ELISA Kit is used to quantitatively measure human FGF19 levels in serum, plasma, or tissue homogenates. It performs well in important characteristics, including sensitivity and specificity. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of FGF19 in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

FGF19 is an ileum-derived postprandial enterokine that governs bile acid and nutrient metabolism. FGF19 mediates the negative feedback regulation of bile salt synthesis by bile salts. FGF19 is inducibly expressed by the terminal ileum in response to bile acids that are reabsorbed from the intestine. It is released to the portal blood and will bind to its receptor in the liver to down-regulate the rate-limiting enzyme in bile acid synthesis. β -Klotho enables FGF19 binding to FGFR4 and acts as the obligatory coreceptor that permits FGF19–FGFR4 signaling.



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. This growth factor is a high affinity, heparin dependent ligand for FGFR4. Expression of this gene was detected only in fetal but not adult brain tissue. Synergistic interaction of the chick homolog and Wnt-8c has been shown to be required for initiation of inner ear development.

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 human FGF19 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 %	92
	Range %	87-99
1:2	Average %	103
	Range %	99-104
1:4	Average %	93
	Range %	87-98
1:8	Average %	91
	Range %	89-97

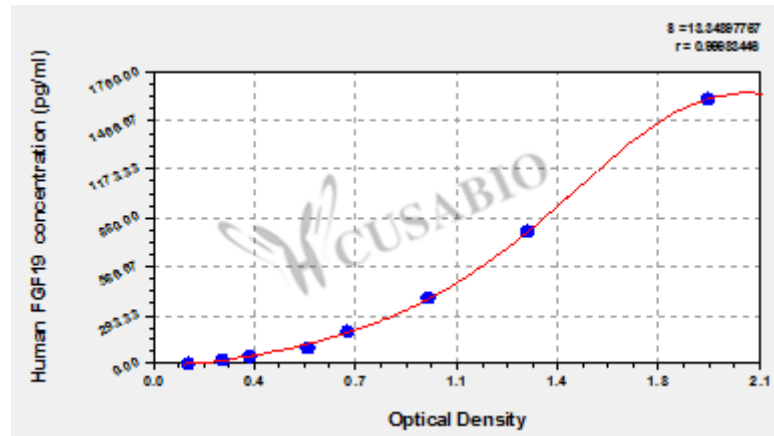
Recovery

The recovery of human FGF19 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)	95	92-99
EDTA plasma (n=4)	90	86-93

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
1600	1.911	1.989	1.950	1.815
800	1.323	1.321	1.322	1.187
400	0.992	0.954	0.973	0.838
200	0.700	0.686	0.693	0.558
100	0.542	0.569	0.556	0.421
50	0.358	0.336	0.347	0.212
25	0.262	0.244	0.253	0.118
0	0.133	0.136	0.135	?

Msds

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