



Rat fibroblast growth factor 21 (FGF21) ELISA kit (31.25-2000 pg/mL)

Cat. No.:	0126WXX-05
Assay Type:	Quantitative sandwich ELISA
Target Species:	Rat
Assay Target:	FGF21
Size:	24T; 48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Rat fibroblast growth factor 21 (FGF21) ELISA kit (31.25-2000 pg/mL) is an ELISA -based *in vitro* research tool designed specifically for the quantitative detection of FGF21 in rat samples with a range of 31.25-2000 pg/mL and a minimum detectable dose (sensitivity) of 18.75 pg/mL. The kit is highly sensitive and easy to use.

Assay Principle

This ELISA kit employs the sandwich-ELISA method for rat FGF21. The micro ELISA plate is pre-coated with a specific capture antibody. Standards or samples are added to the wells to bind with the immobilized antibody. Subsequently, a biotinylated detection antibody and avidin-HRP conjugate are added successively. After washing away free components, a substrate solution is introduced, appearing blue in positive wells and turning yellow upon the addition of the stop solution. The OD is measured at 450 nm \pm 2 nm and is directly proportional to the rat FGF21 concentration.



Background

FGF21 is an endocrine hormone secreted by multiple tissues, particularly the liver. It belongs to the fibroblast growth factor family but functions differently from traditional growth factors. FGF21 is primarily induced during stress or fasting states, acting as a crucial metabolic regulator that influences the body's energy balance, glucose homeostasis, and fatty acid metabolism. FGF21 plays a pivotal role in the onset, progression, and treatment of obesity. Its analogues have emerged as novel therapeutic agents and are being investigated for their potential in anti-obesity interventions.

Synonyms

Fgf21; FGF-21

Formula Weight

22,300 Da

Applications

Rat fibroblast growth factor 21 (FGF21) ELISA kit (31.25-2000 pg/mL) is used to quantify FGF21 in serum, plasma, and other biological fluids of rat, providing data to support research in a wide range of areas, including cytokine, metabolism, obesity, and others.

Research Area

Cytokine; Metabolism; Obesity

Specification

Sample Type

Serum; Plasma; Other biological fluids

Detection Range

31.25-2000 pg/mL

Sensitivity

18.75 pg/mL

Cross-reactivity

No significant cross-reactivity or interference was observed.

Recovery

91-99%

Storage

Store at 4°C.