



## Rat fibroblast growth factor 21 (FGF21) ELISA kit (12.5-200 pg/mL)

<b>Cat. No.:</b>	0126WXX-06
<b>Assay Type:</b>	Quantitative competitive ELISA
<b>Target Species:</b>	Rat
<b>Assay Target:</b>	FGF21
<b>Size:</b>	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 (12.5-200 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 12.5-200 pg/mL and a minimum detectable dose (sensitivity) of 4.9 pg/mL. The kit is highly sensitive and easy to use.

#### Assay Principle

This assay utilizes the competitive inhibition enzyme immunoassay technique. A monoclonal antibody specific to FGF21 is pre-coated onto a microplate. A competitive reaction is initiated between biotin-labeled FGF21 and unlabeled FGF21 (from standards or samples) for the limited binding sites on the pre-coated antibody. After incubation and washing, avidin-HRP is added. The amount of bound conjugate and the resulting color intensity are inversely proportional to the concentration of FGF21 in the sample.

#### 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



<b>Formula Weight</b>	22,300 Da
<b>Applications</b>	Rat fibroblast growth factor 21 (FGF21) ELISA kit (12.5-200 pg/mL) is used to quantify FGF21 in serum, plasma, tissue homogenates, cell lysates, cell culture supernates, and other biological fluids of rat, providing data to support research in a wide range of areas, including cytokine, metabolism, obesity, and others.
<b>Research Area</b>	Cytokine; Metabolism; Obesity

## Specification

<b>Sample Type</b>	Serum; Plasma; Tissue homogenates; Cell lysates; Cell culture supernates; Other biological fluids
<b>Detection Range</b>	12.5-200 pg/mL
<b>Sensitivity</b>	4.9 pg/mL
<b>Precision (Intra-assay)</b>	CV<10%
<b>Precision (Inter-assay)</b>	CV<12%
<b>Cross-reactivity</b>	No significant cross-reactivity or interference was observed.
<b>Recovery</b>	85-96%
<b>Storage</b>	Store at 2-8°C.