



Rat leptin receptor (LEPR) ELISA kit (50-1000 pg/mL)

Cat. No.:	0126WXX-977
Assay Type:	Quantitative ELISA
Target Species:	Rat
Assay Target:	LEPR
Size:	48T; 96T

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

Product Overview

Description	Rat leptin receptor (LEPR) ELISA kit (50-1000 pg/mL) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of LEPR in rat samples with a range of 50-1000 pg/mL and a minimum detectable dose (sensitivity) of 1.0 pg/mL. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on LEPR antibody-LEPR antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect LEPR antigen targets in samples.
Background	LEPR, as a peptide hormone receptor, is responsible for receiving leptin signals. When leptin binds to LEPR, it initiates a series of intracellular cascades, including the positive regulation of the JAK-STAT signaling pathway and the positive regulation of the PI3K signaling pathway. These pathways are crucial for translating leptin signals into biological responses, such as appetite suppression and metabolic regulation. The relationship between LEPR and obesity is paramount. When leptin functions as the “satiety hormone,” LEPR acts as the “satiety switch” in the brain and other tissues. Without functional receptors, leptin signals cannot be received regardless of how high leptin concentrations become.
Synonyms	CD295; LEPR; OBR; LR
Formula Weight	96,042 Da



Applications

Rat leptin receptor (LEPR) ELISA kit (50-1000 pg/mL) is used to quantify LEPR in serum, plasma, cell culture supernatants, body fluid, tissue homogenate of rat, providing data to support research in a wide range of areas, including signal transduction, CD & adhesion molecule, metabolic pathway, endocrinology, obesity, etc.

Research Area

Signal transduction; CD & Adhesion molecule; Metabolic pathway; Endocrinology; Obesity

Specification

Sample Type

Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate

Detection Range

50-1000 pg/mL

Sensitivity

1.0 pg/mL

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 2-8°C.