



## Mouse leptin (LEP) ELISA kit (0.5-16 ng/mL)

<b>Cat. No.:</b>	0126WXX-873
<b>Assay Type:</b>	Quantitative ELISA
<b>Target Species:</b>	Mouse
<b>Assay Target:</b>	LEP
<b>Size:</b>	48T; 96T

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

### Product Overview

<b>Description</b>	Mouse leptin (LEP) ELISA kit (0.5-16 ng/mL) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of LEP in mice samples with a range of 0.5-16 ng/mL and a minimum detectable dose (sensitivity) of 0.1 ng/mL. The kit is highly sensitive and easy to use.
<b>Assay Principle</b>	The ELISA analytical biochemical technique is based on LEP antibody-LEP antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect LEP antigen targets in samples.
<b>Background</b>	LEP is a hormone that plays a crucial role in regulating body fat. Secreted by fat cells, it functions as part of a signaling pathway that controls the extent of fat storage in the human body. This protein belongs to the leptin family and possesses dual functions as both a growth factor and a hormone. LEP's primary functions include: regulating food intake, controlling energy expenditure, participating in glucose homeostasis regulation, modulating adipocyte differentiation, and influencing fatty acid metabolism. Obesity research frequently focuses on deciphering the mechanisms of leptin resistance and developing countermeasures, including the development of drugs that enhance brain sensitivity to leptin or the exploration of alternative pathways for regulating appetite and energy balance. Understanding leptin-mediated signaling pathways is central to this research.
<b>Synonyms</b>	OB; OBS; Obesity Homolog; Obesity Factor; Obese Protein
<b>Formula Weight</b>	18,641 Da



### Applications

Mouse leptin (LEP) ELISA kit (0.5-16 ng/mL) is used to quantify LEP in serum, plasma, tissue homogenates, feces, urine, and body fluids of mouse, providing data to support research in a wide range of areas, including metabolic pathway, endocrinology, cardiovascular biology, obesity, etc.

### Research Area

Metabolic pathway; Endocrinology; Cardiovascular biology; Obesity

## Specification

<b>Sample Type</b>	Serum; Plasma; Tissue homogenate; Feces; Urine; Body fluids
<b>Detection Range</b>	0.5-16 ng/mL
<b>Sensitivity</b>	0.1 ng/mL
<b>Precision (Intra-assay)</b>	CV<15%
<b>Precision (Inter-assay)</b>	CV<15%
<b>Cross-reactivity</b>	No significant cross-reactivity or interference was observed.
<b>Storage</b>	Store at 2-8°C.