

Mouse Leptin (LEP) ELISA Kit-Sandwich

Cat. No.: EK5F203

Product Type: Animal Immunoassay Kits

Size: 48T;96T

Product Overview

BioVenic Mouse Leptin (LEP) ELISA Kit-Sandwich is designed for the quantitative determination of Mouse LEP in serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids using a Sandwich ELISA method. For research use only.

Specifications

Assay Type	ELISA-Sandwich
Specificity	The assay kit is specific for Mouse Leptin (LEP).
Target Species	Mouse
Species Reactivity	Mouse
Detection Range	0.17-10 ng/mL
Reproducibility	Intra-Assay: CV < 10%; Inter-Assay: CV < 12%
Assay Time	Around 90 min
Sample Requirement	Serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids.

Target Information

Leptin plays a crucial role in regulating energy balance and body weight control. Once released into the bloodstream, it exerts central and peripheral effects by binding to the leptin receptor (LEPR), present in many tissues, activating several major signaling pathways. In mice, leptin is a hormone secreted by adipose tissue that serves various physiological functions, including energy balance, reproductive function, immune regulation, and bone metabolism. Leptin influences appetite and energy balance by targeting specific neurons in the hypothalamus. For instance, the expression of the leptin receptor (Lepr) in the hypothalamus significantly affects appetite and body weight. Studies have demonstrated that Lepr knockout mice experience substantial increases in appetite and body weight, highlighting leptin's key role in regulating energy intake and expenditure. Additionally, leptin can curb appetite by inhibiting the expression of neuropeptide Y (NPY).

Target/Biomarker	Mouse LEP
Target Synonym	OB; OBS; Obesity Homolog; Obesity Factor; Obese Protein

Gene ID [16846](#)

UniProt ID [P41160](#)

Shipping and Storage

This product is shipped with gel ice packs. It is recommended to store at 2-8 °C (Up to 6 months).

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.