Leptin (rat), ELISA kit

The Leptin (rat), ELISA kit is a colorimetric immunometric enzyme immunoassay kit

The Leptin (rat), EIA kit is a colorimetric immunometric enzyme immunoassay kit with results in 3 hours.

The adipokine leptin is a hormone secreted predominantly by adipose tissue that signals through leptin receptors in the hypothalamus to decrease appetite and increase energy expenditure. Binding of leptin to the long-form of the leptin receptor in the hypothalamus reduces neuropeptide Y (NPY) and agouti-related protein (AgRP) activity, while stimulating anorexigenic pro-opiomelanocortin (POMC) neuron activity to reduce appetite. In peripheral tissues, leptin antagonizes insulin signaling, increases fatty acid oxidation, decreases insulin production in pancreatic beta cells, and promotes fertility. Its expression in adipocytes can be regulated in a paracrine fashion by other adipokines such as IL-6 (stimulation) and TNF-α (inhibition). Leptin deficient mice display severe insulin resistance, obesity, and decreased fertility, all of which are reversible by administration of exogenous leptin. In contrast, elevated circulating levels of leptin are associated with increased obesity, indicative of an acclimated state of leptin resistance which is not well understood.

Citations: 21 View Online »

Ordering Information

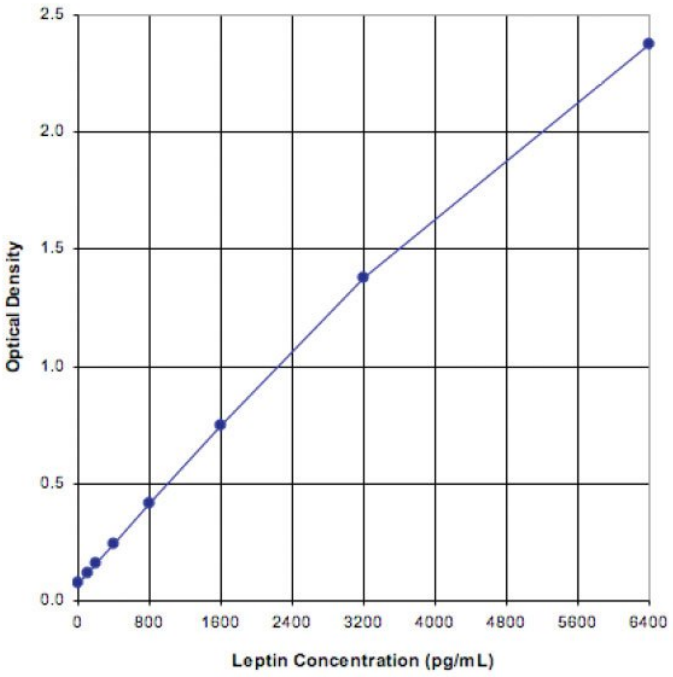
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ADI-900-015A	96 wells

Manuals, SDS & CofA

View Online »

- No edge effect - all incubations at room temperature eliminate risk of evaporation at 37°C
- Broad dynamic range - easily quantify high and low levels of leptin
- Convenient- store all reagents at 4°C
- Fast - fully quantitative results in just 3 hours from up to 39 samples in duplicate
- Pre-coated plates and ready-to-use reagents save you time


2.5
2.0
1.5
1.0
0.5
0.0
Optical Density
0
800
1600
2400
3200
4000
4800
5600
6400
Leptin Concentration (pg/mL)

Handling & Storage

Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	OB gene product
Application	Colorimetric detection, ELISA
Application Notes	For the quantitative determination of rat leptin in culture supernatants, plasma, and serum.
Assay Time	3 hours
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	Microtiter plate, Standard, Antibody, Conjugate, Assay buffer 28, TMB Substrate, Stop solution 2, Wash buffer concentrate
Sensitivity	67.2 pg/ml (range 100 – 6,400 pg/ml)
Species Reactivity	Rat
Technical Info / Product Notes	**Cited samples:** Cytokine ELISAs Cited Samples
UniProt ID	P50596
Wavelength	450 nm

Last modified: May 29, 2024

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