

# Leptin monoclonal antibody (11) (biotin conjugate)

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-alpha (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.

This antibody is covered by our [Worry-Free Guarantee](#).

Manuals, SDS & CofA

[View Online »](#)

## Handling & Storage

Long Term Storage +4°C

Shipping Blue Ice

**Regulatory Status** RUO - Research Use Only

## Product Details

|                      |  |
|----------------------|--|
| Alternative Name     | Lep, Adipokine leptin  |
| Application          | ELISA  |
| Clone                | 11   |
| Formulation          | Liquid. In 0.01M phosphate buffer, pH 7.4, containing 0.14M sodium chloride and 15mM sodium azide. |
| GenBank ID           | 3952   |
| Host                 | Mouse  |
| Immunogen            | Recombinant human leptin.  |
| Isotype              | IgG1κ  |
| Purity Detail        | Protein A/G-purified.  |
| Species Reactivity   | Human  |
| UniProt ID           | P41159   |
| Worry-free Guarantee | This antibody is covered by our <a href="#">Worry-Free Guarantee</a>                               |

Last modified: May 29, 2024



ENZO LIFE SCIENCES,  
INC.  
Phone: 800.942.0430  
[info-  
usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-  
eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-  
be@enzolifesciences.com](mailto:info-be@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-  
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-  
de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-  
uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)