



Human LEP peptide (DAG332)

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

PRODUCT INFORMATION

Product Overview	Recombinant Human Leptin is a single non-glycosylated polypeptide chain containing 146 amino acids and having a molecular weight of 16 kDa. The sequence of the first five N-terminal amino acids was determined to be Ala-Val-Pro-Ile-Gln.
Antigen Description	Leptin (Greek leptos meaning thin) is a 16 kDa protein hormone that plays a key role in regulating energy intake and energy expenditure, including appetite and metabolism. It is one of the most important adipose derived hormones. The Ob(Lep) gene (Ob for obese)
Species	Human
Conjugate	Unconjugated
Applications	The ED ₅₀ calculated by the Leptin-dependant stimulation of Human OB-R transfected mouse BaF3 indicator cells is 0.5-1.6 ng/ml. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested.
Format	Purified, Lyophilized; Reconstitute in water. Further dilutions can be made in other aqueous buffers.
Concentration	1 mg/ml (OD _{280nm} , E _{0.1%} = 0.878) (prior to lyophilization)
Buffer	Lyophilized from 0.0045M NaHCO ₃
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Leptin, the "satiety hormone", is a hormone made by fat cells which regulates the amount of fat stored in the body. It does this by adjusting both the sensation of hunger, and adjusting energy
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expenditures. Hunger is inhibited (satiety) when the amount of fat stored reaches a certain level. Leptin is then secreted and circulates through the body, eventually activating leptin receptors in the arcuate nucleus of the hypothalamus. Energy expenditure is increased both by the signal to the brain, and directly via leptin receptors on peripheral targets. The effect of leptin is opposite to that of ghrelin, the "hunger hormone". Ghrelin receptors are on the same brain cells as leptin receptors, so these cells receive competing satiety and hunger signals. Leptin and ghrelin, along with many other hormones, participate in the complex process of energy homeostasis.

Keywords

LEP; leptin; leptin (murine obesity homolog) , leptin (obesity homolog, mouse) , OB, OBS; obese protein; obesity factor; obese, mouse, homolog of; leptin (murine obesity homolog); leptin (obesity homolog, mouse); OB; OBS; FLJ94114;

GENE INFORMATION

Entrez Gene ID

[3952](#)

UniProt ID

[A4D0Y8](#)
