



Mouse LEP peptide (DAG294)

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

PRODUCT INFORMATION

Product Overview	Recombinant Mouse Leptin is a single, non-glycosylated, polypeptide chain containing 147 amino acids and having a molecular weight of 16,240 Da, was expressed in E.coli. This sequence of the first five N-terminal amino acids was determined to be Met-Val-Pro-Ill
Antigen Description	Leptin plays a critical role in the regulation of body weight by inhibiting food intake and stimulating energy expenditure. Defects in Leptin production cause severe hereditary obesity in rodents and humans. In addition to its effects on body weight, leptin
Species	Mouse
Conjugate	Unconjugated
Applications	Biological activity of Mouse Leptin is performed in two different mouse obesity models, ob/ob and NZO. Both strains of mice were treated via intraperitoneal injection once daily at a dose of 5ug Leptin/gram body weight for a period of 14 days. Significant eff
Format	Purified, Lyophilized. Reconstitute using sterile deionized water to a concentration $\geq 100\mu$ g/ml. Further dilutions can be made in other aqueous buffers.
Concentration	1 mg/ml (OD280nm, E0.1% = 0.201) (prior to lyophilization)
Buffer	Lyophilized from 50mM NH_4HCO_3 , pH 8.0
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](#)
