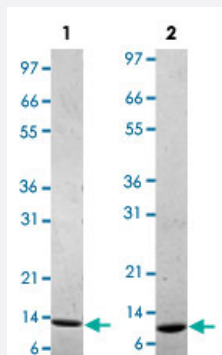


Bioactive

LEP (Human) Recombinant Protein

Catalog # P4420 Size 1 mg

Applications



Lane 1: non-reducing conditions

Lane 2: reducing conditions

Result of activity analysis

Result of activity analysis

Serial dilutions of human LEP were added to Baf/3 cells. After 44 hours cell proliferation was measured and the linear portion of the curve was used to determine the ED50.

Specification

Product Description	Human LEP (Q6NT58) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	MVPIQKVQDDTKLIKTVTRINDISHTQSVSSKQKVTGLDFIPGLHPILTSKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDLGGVLEASGYSTEVVALSRLQGSLQ DMLWQLDLSPGC
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	16
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system

Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the dose dependent proliferation of BaF3 cells. The expected ED ₅₀ for this effect is 1.1-1.6 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	No additive
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterilized water, store at -20°C or -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis Serial dilutions of human LEP were added to Baf/3 cells. After 44 hours cell proliferation was measured and the linear portion of the curve was used to determine the ED50.

Applications

- Functional Study
- SDS-PAGE

Gene Info — LEP

Entrez GeneID	3952
Protein Accession#	Q6NT58
Gene Name	LEP
Gene Alias	FLJ94114, OB, OBS
Gene Description	leptin
Omim ID	164160
Gene Ontology	Hyperlink

Gene Summary

This gene encodes a protein that is secreted by white adipocytes, and which plays a major role in the regulation of body weight. This protein, which acts through the leptin receptor, functions as part of a signaling pathway that can inhibit food intake and/or regulate energy expenditure to maintain constancy of the adipose mass. This protein also has several endocrine functions, and is involved in the regulation of immune and inflammatory responses, hematopoiesis, angiogenesis and wound healing. Mutations in this gene and/or its regulatory regions cause severe obesity, and morbid obesity with hypogonadism. This gene has also been linked to type 2 diabetes mellitus development. [provided by RefSeq]

Other Designations

leptin (murine obesity homolog)|leptin (obesity homolog, mouse)|obese, mouse, homolog of|obesity factor

Pathway

- [Adipocytokine signaling pathway](#)
- [Cytokine-cytokine receptor interaction](#)
- [Jak-STAT signaling pathway](#)
- [Neuroactive ligand-receptor interaction](#)

Disease

- [Adenocarcinoma](#)
- [Albuminuria](#)
- [Amyotrophic lateral sclerosis](#)
- [Anorexia Nervosa](#)
- [Anoxia](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Behcet Syndrome](#)
- [Birth Weight](#)
- [Body Weight](#)

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bulimia](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Restenosis](#)
- [Cues](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Diseases in Twins](#)
- [Dyslipidemias](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fatty Liver](#)
- [Fetal Membranes](#)
- [Fetal Weight](#)
- [Genetic Predisposition to Disease](#)

- [HELLP Syndrome](#)
- [Hepatitis](#)
- [Hypertension](#)
- [Inflammation](#)
- [Insulin Resistance](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Multiple Sclerosis](#)
- [NARP](#)
- [Neovascularization](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Pregnancy in Diabetics](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)

- [Psoriasis](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Satiety Response](#)
- [Schizophrenia](#)
- [Sleep Apnea](#)
- [Taste](#)
- [Thinness](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Neoplasms](#)
- [Weight Gain](#)
- [Weight Loss](#)
- [Werner syndrome](#)