

Datasheet for ABIN7536195 **Leptin Protein (LEP)**

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Overview

Quantity:	100 µg
Target:	Leptin (LEP)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Active Recombinant Rat LEP Protein
Sequence:	VPIHKVQDDT KTLIKTIVTR INDISHTQSV SARQRTGLD FIPGLHPILS LSKMDQTLAV YQQILTSLPS QNVLQIAHDL ENLRDLLHLL AFSKSCSLPQ TRGLQKPESL DGVLEASLYS TEVVALSRLQ GSLQDILQQL DLSPEC
Specificity:	Val22-Cys167
Purity:	> 97 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	<0.1EU/µg
Biological Activity Comment:	Measured by its binding ability in a functional ELISA. Immobilized Human LEPR at 5 µg/mL (100 µL/well) can bind Rat LEP with a linear range of 1-530 ng/mL.

Target Details

Target:	Leptin (LEP)
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Target Details

Alternative Name:	LEP (LEP Products)
Background:	Description: Leptin is a hormone secreted from white adipocytes and plays important role in the regulation of food intake and energy balance. Leptin functions via signaling pathways involving OB-R in hypothalamus. Animal models have revealed the influence of Leptin in reducing body weight and regulating blood glucose level. When mutations are introduced in obese gene, mice with impaired function of leptin are massively obese and in high risk of diabetes. Leptin deficiency reduces metabolic rate. Leptin deficient mice are less active and with lower body temperature than normal animals. Human Leptin shares approximately 84 % sequence identity with the mouse protein. Human Leptin consists of 167 amino acid residue including a 21 amino acid residue signal sequence and 146 amino acid residue mature protein sequence. Name: OB, obese,LEP
Gene ID:	25608
UniProt:	P50596
Pathways:	JAK-STAT Signaling , AMPK Signaling , Hormone Transport , Peptide Hormone Metabolism , Hormone Activity , Negative Regulation of Hormone Secretion , Regulation of Carbohydrate Metabolic Process , Feeding Behaviour , Monocarboxylic Acid Catabolic Process

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Buffer:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80°C for 12 months. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.