

## Recombinant Human Leptin Protein (Active)

Catalog No. PKSH032688

### Description

<b>Synonyms</b>	Leptin; Obese Protein; Obesity Factor; LEP; OB; OBS
<b>Species</b>	Human
<b>Expression_host</b>	E.coli
<b>Sequence</b>	Val22-Cys167
<b>Accession</b>	P41159
<b>Mol_Mass</b>	16.1 kDa
<b>AP_Mol_Mass</b>	14 kDa
<b>Bio_activity</b>	Immobilized Human Leptin at 10µg/ml(100 µl/well) can bind Human CD295-His(Cat: PKSH033606).

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg as determined by the LAL method.
<b>Storage</b>	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

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.

## SDS-PAGE

