

Recombinant Human Leptin Protein

Catalog No. PKSH032688

Note: Centrifuge before opening to ensure complete recovery of vial contents.

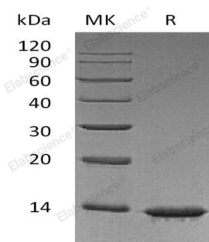
Description

| | |
|------------------------------------|--|
| Synonyms | Leptin;Obese Protein;Obesity Factor;LEP;OB;OBS |
| Species | Human |
| Expression Host | E.coli |
| Sequence | Val22-Cys167 |
| Accession | P41159 |
| Calculated Molecular Weight | 16.1 kDa |
| Observed molecular weight | 14 kDa |
| Tag | None |
| Bioactivity | Not validated for activity |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, 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. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

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

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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.