

RP00028

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Recombinant Human Leptin/LEP Protein

Catalog No.: RP00028

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
<I>E. coli</I>	3952	P41159

Tags

No tag

Synonyms

LEP;LEPD;OB;OBS;leptin

Product Information

Source

<I>E. coli</I>

Purification

≥ 90 % as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of 50mM Tris, 150mM NaCl, pH 8.0. Contact us for customized product form or formulation.

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.

Contact



www.abclonal.com

Background

Leptin is one of the most important hormones 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 protein and/or its regulatory regions cause severe obesity, and morbid obesity with hypogonadism. This protein has also been linked to type 2 diabetes mellitus development.

Basic Information

Description

Recombinant Human Leptin/LEP Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Val22-Cys167) of human Leptin (Accession #NP_000221.1).

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human Leptin at 2 μg/mL (100 μL/well) can bind Recombinant Human Leptin R/CD295 with a linear range of 1.22-261.45 ng/mL.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

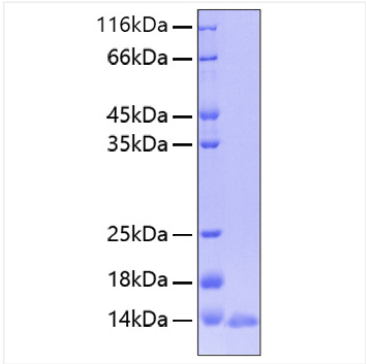
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

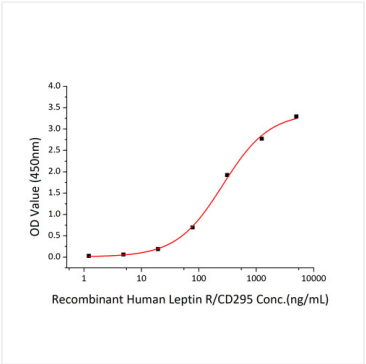
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Leptin/LEP Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human Leptin at 2µg/mL (100 µL/well) can bind recombinant Human Leptin R/CD295 with a linear range of 1.22-261.45 ng/mL.