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Leptin

Recombinant Human Leptin (OB)

Catalog#: **BX1102S: 2.0 mg**
BX1102L: 5.0 mg
Lot#: On label

Formulation: Lyophilized from a volatile buffer (50 mM NH_4HCO_3, pH 8.0).
Preservative: None.
MW: 16 kDa
Purity: >97% on 15% SDS-PAGE.
Source: Recombinant mature protein expressed and purified from *E. coli*.
Sterility: 0.2μm membrane-filtered and packaged aseptically.
ED50: ND
Endotoxin: ≤0.1 EU/μg determined by Limulus Amebocyte Lysate (LAL) Assay (Sigma).
QC Tests: SDS-PAGE, Native PAGE

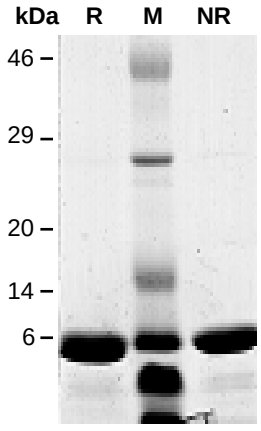
Reconstitution and Use:

Reconstitute the contents of the vial using a sterile buffer (pH8.0 or above) to a concentration no less than 100 μg/ml and aliquot for future use. *(If the initial rehydration is too dilute, activity may be lost due to the non-specific adsorption to the container).* The solution can then be further diluted to a working solution.

If the product is going to be used for applications requiring absolute asepsis, it's best to filter-sterilize the solution using a sterile and non-pyrogenic 0.2 μm membrane before use.

Storage and Stability:

Upon receiving, store the product at −20°C. After reconstitution, store the working aliquots at 2-8 °C for no more than 3 months. For extended storage, aliquot the rehydrated solution (≥100μg/ml) and freeze at −70°C or -20°C. Avoid repeated freezing and thawing. Dilute solutions stored at -20°C could lose activity faster.



Recombinant human leptin (25 ug of L1102S) was resolved on a 12% SDS-PAGE, with (R) or without 2-mercapto-ethanol, and stained with Coomassie Blue.

About Human Leptin

Leptin is a 16 kDa(146 amino acid residues), non-glycosylated protein hormone involved in regulating body weight, metabolism and reproductive function. It is encoded by the obese (ob) gene and expressed predominantly by adipocytes consistent with the fact that body weight is sensed mainly as the total mass of fat in the body. Leptin is also secreted by cells in the epithelium of the stomach and in the placenta in smaller amounts. Leptin receptors are highly expressed in areas of the hypothalamus that are known to be important in regulating body weight, as well as in T lymphocytes and vascular endothelial cells.

Amino Acid Sequence:

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MVPIQKVQDD TKTLIKTIVT RINDISHTQS VSSKQKVTGL
DFIPGLHPIL TLSKMDQTLA VYQQILTSMP SRNVIQISND
LENLRDLLHV LAFSKSCHLP WASGLETLDS LGGVLEASGY
STEVVALSRL QGSLQDMLWQ LDLSPGC
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References:

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