

Datasheet for 009-001-320**Leptin Human Recombinant Protein****Overview**

Description:	Leptin Human Recombinant Protein - 009-001-320
Item No.:	009-001-320
Size:	1000 µg
Applications:	SDS-PAGE
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Leptin inhibits food intake and stimulates energy expenditure. Leptin also has thermogenic actions and regulates enzymes of fatty acid oxidation. Severe hereditary obesity in rodents and humans is caused by defects in leptin production. In addition to its critical role in the physiologic regulation of body weight leptin has a variety of other physiologic and pathologic functions resembling those of cytokines. These functions include the regulation of hematopoiesis, angiogenesis, wound healing, inflammation, and immune responses. Leptin Human Recombinant produced in E. coli is a single, non-glycosylated, polypeptide chain containing 147 amino acids and having a molecular mass of 16 kDa.
Synonyms:	Leptin, LEP cytokine, Obesity factor, Obese protein
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	LEP
Purity/Specificity:	Purity was determined to be greater than 95% by analysis by RP-HPLC and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - P41159

- [NCBI](#)

Application Details

Tested Applications:	SDS-PAGE
Application Note:	Leptin protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-Leptin in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Biological Activity: Human Recombinant Leptin is fully biologically active when compared to standard. The ED50, calculated by the leptin-dependent stimulation of Human OB-R transfected mouse BaF/3 proliferation, is 1.36 ng/ml. Endotoxin Level: Measured by LAL is <0.01ng/μg or <0.1EU/μg.

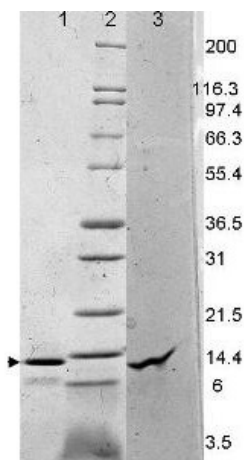
Formulation

Physical State:	Lyophilized
Concentration:	0.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Leptin Human Recombinant Protein. Lane 1: Leptin, unreduced. Lane 2: prestained MW markers. Lane 3: Leptin, reduced. Load: 1 μ g per lane. Predicted/Observed size: 16 kDa, ~15 kDa for Leptin. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.