For Research Use Only

Recombinant Rat Leptin protein (His Tag)



Catalog Number: Eg0892

Basic Information

Species: Rat

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Rat Leptin protein Val22-Cys167 (Accession# P50596) with a His tag at the N-terminus.

GeneID:

25608

Accession: P50596

Predicted Molecular Mass:

17.2 kDa **SDS-PAGE**:

15 kDa, reducing (R) conditions

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20°C to -80°C as lyophilized proteins.

3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

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

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Leptin is a 16 kDa adipocyte-derived hormone, and it has attracted interest in the field of obesity research due to its role in the regulation of energy balance. Leptin, secreted from adipose tissues in proportion to the fat store, acts in the hypothalamus to regulate feeding behavior. leptin has also been shown to play an essential role in tumorigenesis, tumor progression, and metastasis, due to its oncogenic, mitogenic, proinflammatory, and pro-angiogenic actions. Mutations in this gene and/or its regulatory regions cause severe obesity, and morbid obesity with hypogonadism. Leptin has also been linked to type 2 diabetes mellitus development.

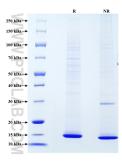
References

1. Arnold M. et al. (2016) Cancer Epidemiol. 41:8-15. 2. Zhang Y. et al. (1994) Nature. 37:425-32. 3. de Luis DA. et al. (2009) Minerva Med. 229-36. 4. Jiang N. et al. (2014) Drug Des Devel Ther. 8:2295-302. 5. Vansaun MN. et al. (2013) Clin Cancer Res. 19:1926-1932.

Synonyms

Lep, OB

Selected Validation Data



Purity of Recombinant Rat Leptin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.