

Recombinant Human Nesfatin-1

#R00543

Size: 100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.

- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Nesfatin is a metabolic polypeptide and is the N-terminal region of the precursor protein, Nucleobindin2 (encoded by NUCB2 gene). It is a naturally occurring protein and originally identified as a hypothalamic neuropeptide. Additionally, Nesfatin can be found in other areas of brain, and in pancreatic isletsβ-cells, gastric endocrine cells and adipocytes. It is responsible for regulating appetite and production of body fat. Excess nesfatin-1 in the brain leads to a loss of appetite, less frequent hunger, a 'sense of fullness', and a drop in body fat and weight. A lack of nesfatin-1 in the brain leads to an increase of appetite, more frequent episodes of hunger, an increase of body fat and weight, and the inability to 'feel full'.

AA Sequence

VPIDIDKTKVQNIHPVESAKIEPPDTGLYYDEYLKQVID
VLETDKHFRKQLQKADIEEIKSGRLSKELDLVSHHVRT

KLDEL

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Nucleobindin 2
Accession	P80303
GeneID	4925
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 9.6 kDa, a single non-glycosylated polypeptide chain containing 82 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity is tested by in vivo assay using healthy wild type male mice (C57BL/6J).
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm

	filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rHuNesfatin-1 as determined by LAL method.
