



Recombinant Human Nesfatin

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FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-142
Size:	100 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	4925
Synonyms:	Nesfatin

Nesfatin-1 is a metabolic polypeptide encoded in the N-terminal region of the precursor protein, Nucleobindin2 (NUCB2). Originally identified as a hypothalamic neuropeptide, Nesfatin-1 is also expressed in other areas of the brain, and in pancreatic islets β -cells, gastric endocrine cells and adipocytes. Nesfatin-1 suppresses food intake and can regulate energy metabolism in a Leptin independent manner. Recombinant human Nesfatin-1 is a 9.7 kDa protein containing 82 amino acid residues.

Sequence

VPIDIDKTKV QNIHPVESAK IEPPDTGLYY DEYLKQVIDV
LETDKHFREK LQKADIEEIK SGRLSKELDL VSHHVRTKLD EL

Database References

Protein RefSeq:	NP_005004
Uniprot ID:	P80303
mRNA RefSeq:	NM_005013.2

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analysis
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized (10mM Sodium Phosphate, pH 6.5)
Length (aa):	82
MW:	9.7 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Determined by an in vivo assay using healthy wild type male mice (C57BL/6J). Mice were treated via intraperitoneal injection once at a dose of 4µg Nesfatin-1/gm of body weight. Significant effects on body weight and food consumption were observed relative to saline-treated controls.