

TECHNICAL DATA SHEET

# Recombinant Human Nesfatin-1 (Carrier-free)

Catalog Number: 21-7114

**RPx-Pro™ Recombinant Protein**

PRODUCT INFORMATION

**CONTENTS**

Recombinant Human Nesfatin-1 (Carrier-free)

**DESCRIPTION**

Nesfatin-1 is a highly conserved metabolic polypeptide derived through cleavage of its precursor protein, nucleobindin 2 (NUCB2). Nesfatin -1 is a secreted protein expressed in the hypothalamus and is implicated in regulation of appetite control and feeding behavior. It is described as an anorexigenic peptide and a satiety molecule. There is some indication that it plays a role in the adaptive response under stress conditions.

**MOLECULAR MASS**

Recombinant Human Nesfatin-1 consists of 82 amino acids and has a molecular weight of 9.7 kDa.

**AMINO ACID SEQUENCE**

VPIDIDKTKV QNIHPVESAK IEPDPTGLYY DEYLKQVIDV LETDKHFREK LQKADIEEIK SGRLSKELDL VSHHVRTKLD EL

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

**BIOACTIVITY**

Measured through an in vivo assay where Nesfatin-1 is injected at 4 μg/g of body weight into healthy wild type male C57BL/6J mice. Compared to saline-treated controls, significant effects on body weight and food consumption are expected.

**RESEARCH AREAS**

Diabetes, Neurobiology

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Shimizu H, Ohsaki A, Oh-I S, Okada S and Mori M. 2009. Peptides. 30(5): 995-998. Stengel A and Tache Y. 2011. Endocrinology. 152(11): 4033-4038. Emmerzall TL and Kozicz T. 2013. Curr Pharm Des. 19(39): 6941-6948.

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