

Recombinant Human Nesfatin (rHuNesfatin)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

601-22

Source:

Escherichia coli.

Molecular Weight:

Approximately 9.6 kDa, a single non-glycosylated polypeptide chain containing 82 amino acids.

Quantity:

 $20\mu g/100\mu g/1000\mu g$

AA Sequence:

VPIDIDKTKV QNIHPVESAK IEPPDTGLYY DEYLKQVIDV LETDKHFREK LQKADIEEIK

SGRLSKELDL VSHHVRTKLD EL

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: Endotoxin: Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.

Less than 1 EU/µg of rHuNesfatin-1 as determined by LAL method.

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.

Shipping:

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

recommended below.

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.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Human Nesfatin

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'.

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