



**Product name** Human NT-proBNP SIL-protein



**Catalog number** BN045556

**Uniprot ID** P16860

## Product description

The N-terminal part of the human brain natriuretic peptide (BNP) precursor proBNP (NT-proBNP) is widely used as a diagnostic biomarker for heart failure (1).

Labelled NT-proBNP is a recombinant protein, stable isotope labelled (SIL), designed for use as an internal standard for quantitative analysis of NT-proBNP by mass spectrometry (MS).

**Synonyms:** Natriuretic peptides B, Gamma-brain natriuretic peptide

## Protein sequence

GHPLGSPGSASDLETSGLQEQRNHLQGKLSLQVEQTSLEPLQESPRPTGVWKSREVATEGIRGHRKMVLYTLRAPRSPKMOVQSGSGCFGRK  
MDRISSSSGLGCKVLRHH

## Product features and protocols

### Key features

- 1 Purity >90% as determined by SDS-PAGE
- 2 Labelling Uniform-<sup>15</sup>N
- 3 Isotopic incorporation >99% as determined by LC-MS/MS analysis of digested SIL-protein

### Other features

Predicted MW	8.51 kDa
Expression System	E.coli
Purification Tag	No tag
Protein content	Determined by Bradford assay with BSA as standard
Formulation	Lyophilized from 50 mM NaP buffer pH 7.5

Template009-datasheet protein-V01 BN045556\_V01

### Product preparation

For product preparation we recommend the following steps:

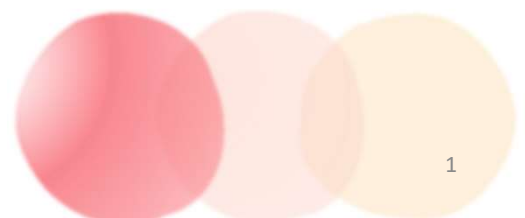
1. Briefly centrifuge the tube before opening
2. Reconstitute by adding the appropriate volume of ultrapure water for a final concentration of 200 µg/ml (e.g. 50 µl for 10 µg or 250 µl for 50 µg conditioning)
3. Vortex gently to insure complete dissolution
4. Wait 15 minutes at Room temperature before proceeding further
5. Vortex gently again and centrifuge briefly

### Product storage

The product is lyophilized and shipped at room temperature. **Store at -80 °C upon receipt.**

After reconstitution, the protein can be preserved at 4°C for a few weeks.

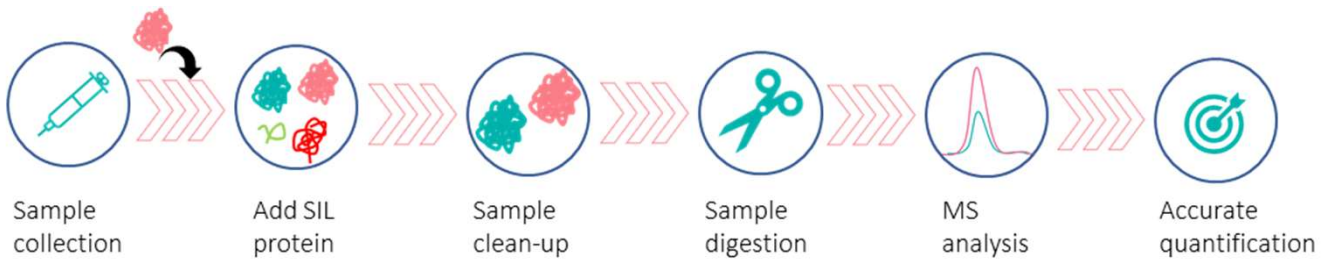
### Avoid multiple freeze-thaw cycles



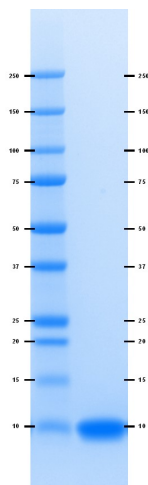
## How to use our product



SIL proteins allow to overcome the process variability since they are added at the very beginning of a sample preparation. This has potential positive impact on your analyte quantification, especially if the analyte interacts with other species commonly present within the matrix (2).



## Supporting information



SDS-PAGE gel analysis of NT-proBNP protein in Reducing/Heated conditions (RH) Stained with Coomassie blue.

## References

1. **Paul M McKie, John C Burnett Jr**, NT-proBNP: The Gold Standard Biomarker in Heart Failure J Am Coll Cardiol. 2016 Dec 6;68(22):2437-2439.
2. **G.Picard, D. Lebert, et al.** PSAQ standards for accurate MS-based quantification of proteins: from the concept to biomedical applications, J. Mass Spectrom. 2012, 47, 1353-1363



The product is intended for research use only. Not for diagnostic or therapeutic use.

## Legal

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