

Product description



Product name Human PCT SIL-protein



Catalog number PC675621

Uniprot ID P01258

Procalcitonin (PCT) is a peptide precursor of the hormone calcitonin. It consists of 116 amino acids.

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

Synonyms: Calcitonin, Katalcin

Protein sequence

APFRSALESSPADPATLSEDEARLLLLAALVQDYVQMKASELEQEEREGSSLDSPRSKRCGNLSTCMLGTYTQDFNKHFTFPQTAIGVGPAGK
KRDMSSDLERDHRPHVSMPQAN

Product features and protocols

Key features

- 1 Purity >95% as determined by SDS-PAGE
- 2 Labelling Arg-¹³C₆, ¹⁵N₄ | Lys-¹³C₆, ¹⁵N₂
- 3 Isotopic incorporation >99% as determined by LC-MS/MS analysis of digested SIL-protein

Other features

Predicted MW	12.8 kDa
Expression System	<i>E. coli</i>
Purification Tag	No tag
Protein content	Determined by BCA assay with BSA as standard
Formulation	Lyophilized from 20 mM Tris pH=7.6 ; 0.1 M NaCl buffer

Template009-datasheet protein-V01 PC675621_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

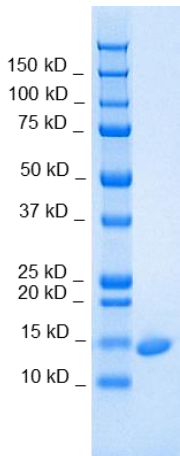
How to use our product



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 (1).



Supporting information



SDS-PAGE gel analysis of PROCALCITONIN protein in Reduced/Heated conditions (RH) and tained with Coomassie blue.

References

1. **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.

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