

Product description

Human Clusterin protein (CLU) is a heterodimeric protein encoded by a single gene and internally cleaved in cells to produce its alpha and beta subunits.

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

Synonyms: Apolipoprotein J (APO-J), Aging-associated gene 4 protein, Complement cytolysis inhibitor (CLI)



Product name Human CLU SIL-protein



Catalog number CL118321

Uniprot ID P10909

Protein sequence

DQTVSDNELQEMSNQGSKYVNKEIQNAVNGVKQIKTLIEKTNEERKTLASNLEEAKKKKEDALNETRESETKLKELPGVCNETMMALWEECKP
CLKQTCMKFYARVCRSGSLVGRQLEEFLNQSSPFYFWMNGDRIDSLENDRQQTHMLDVMQDHFSSRASSIIDELFQDRFFFTREPQDTYHY
LPFSLPHRRPHFFPKSRIVRSLMPFSPYEPNLFHAMFQPFLEMIHEAQQAMDIIHFHSPAFQHPPTFEIREGDDDRTVCREIRHNSTGCLRMK
DQCDKCREILSVDCSTNNPSQAKLRRELDQVAERLTRYKNELLKSYQWKMLNTSSLLEQLNEQFNWVSRLANLTQGEDQYYLRVTTVASH
TSDSDVPSGVTEVVVKLFDSDPITVTVPEVSRKNPKFMETVAEKALQEYRKKHREEHHHHHHHHH (alpha subunit underlined)

Product features and protocols

Key features

- 1** Purity >80% 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	51.2 kDa (alpha subunit 27.0 Kda with polyHis tag beta subunit 24.2 Kda)
Expression System	HEK (Human Embryonic Kidney) cell line
Purification Tag	PolyHis tag at the C-terminus of alpha subunit
Protein content	Determined by BCA assay with BSA as standard
Formulation	Lyophilized from PBS buffer

Product preparation

For product preparation we recommend the following steps:

- Briefly centrifuge the tube before opening
- 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)
- Vortex gently to insure complete dissolution
- Wait 15 minutes at room temperature before proceeding further
- Vortex gently again and centrifuge briefly

Product storage

The product is lyophilized and shipped at ambient 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

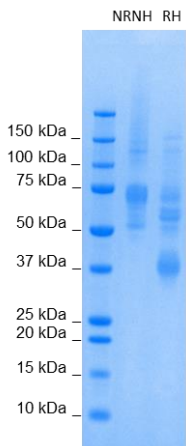
How to use our product



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 Clusterin protein in non-reducing/ non heated conditions (NR/NH) and Reducing/Heated conditions (RH) Stained 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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