

Product description

Human alpha synuclein (SYUA) is a presynaptic neuronal protein linked genetically and neuropathologically to Parkinson's disease. Labelled SYUA is a recombinant protein, stable isotope labelled (SIL), designed for use as an internal standard for quantitative analysis of SYUA by mass spectrometry (MS).

Synonyms: Non-A beta component of AD amyloid



Product name Human SYUA
SIL-protein



Catalog number SY865402

Uniprot ID P37840

Protein sequence

MDVFMKGLSKAKEGVVAAAEEKTKQGVAAEAGKTKEGVLYVGSKTKEGVVHGVATVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAGSIAA
ATGFVKKDKLQKNEEGAPQEGILEDPVDPDNEAYEMPSEEGYQDYEP EA

Product features and protocols

Key features

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

Other features

Predicted MW	14.5 kDa
Expression System	<i>E. coli</i>
Purification Tag	No tag
Protein content	Determined by BCA assay with BSA as standard
Formulation	Lyophilized from 50 mM Tris ; 100 mM NaCl pH=8 buffer

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

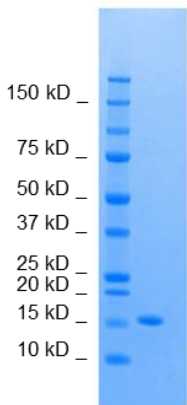
How to use our product



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 SYUA protein in 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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