

Product description



Product name Human APO-A1
SIL-protein



Catalog number AP176846

Uniprot ID P02647

Human apolipoprotein A1 (APO-A1) functions as structural protein components of lipoproteins. APOs are critical in lipid transportation and metabolism and are closely related with onset of atherosclerosis, diabetes and cardiovascular diseases. In Parkinson's disease low levels of APO-AI seems to be related with lower risk of developing the pathology (1).
Labelled APO-A1 is a recombinant protein, stable isotope labelled (SIL), designed for use as an internal standard for quantitative analysis of APO-A1 by mass spectrometry (MS).

Protein sequence

GDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNLKLLDNWDSVTSTFSKLREQLGPVTQEFWDNLEKETEGLRQEMSKDL
EEVKAKVQPYLDDFQKKWQEEEMELYRQKVEPLRAELQEGARQKLHELQEKLSPLGEEMRDRARAHVDALRTHLAPYSDELRLAARLEALK
ENGGARLAEYHAKATEHLSTLSEKAKPALEDLRQGLLPVLESFKV/SFLSALEEYTKKLNTQ

Product features and protocols

Key features

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

Other features

Predicted MW	28.14 kDa
Expression System	<i>E. coli</i>
Purification Tag	No tag
Protein content	Quantitation is carried out by Bradford protein assay using BSA as standard.
Formulation	Lyophilized from 50 mM Tris HCl, 0.3M NaCl, pH=8.0 buffer.

Template009-datasheet protein-V01 AP176846_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 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

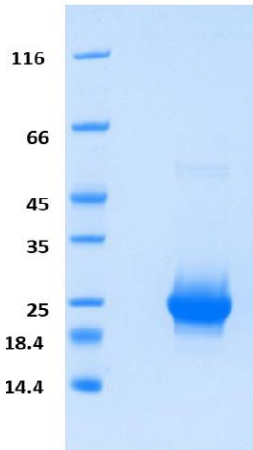
How to use our product



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 (2).



Supporting information



SDS-PAGE gel analysis of APO-AI protein in Reduced/Heated conditions and stained with Coomassie blue.

References

1. **Lin Li** Relationship between Apolipoprotein Superfamily and Parkinson's Disease Chin Med J (Engl). 2017 Nov 5; 130(21): 2616
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.

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