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Product Information

SILu™Lite APOA2, Apolipoprotein A-2, human recombinant, expressed in HEK cells
MS Protein Standard

Catalog Number **MSST0030**
Storage Temperature –20 °C

Synonyms: Apo-AII, ApoA-II

Product Description
SILu™Lite APOA2 is a recombinant human protein expressed in human 293 cells. It is a homodimer consisting of 97 amino acids (including C-terminal polyhistidine and FLAG® tags), with a calculated molecular mass of 11.1 kDa. SILu™Lite APOA2 is an analytical standard designed to be used as starting material for preparation of calibrators and controls in LC-MS applications.

Apolipoprotein A-II (ApoA-II) occurs in plasma as a dimer of two 77-amino acid chains linked by a disulfide bridge.[1] After ApoA-I, it is the second major protein component of HDL, accounting for ~20% of HDL total protein.[1-4] ApoA-II is thought to play an important role in triglyceride metabolism both from animal and human studies.[3,5] Recent findings attribute ApoA-II to inhibitory effects on lipoprotein lipase-mediated hydrolysis of triglyceride-rich particles.[6,7] Additional associations of ApoA-II have been reported for a variety of protein factors including hepatic lipase (HL), lipoprotein lipase (LPL), endothelial lipase, CETP, PLTP, and LCAT.[1-2,8]

Each vial contains 50–65 μg of SILu™Lite APOA2 standard, lyophilized from a solution of phosphate buffered saline. Vial content was determined by the Bradford method using BSA as a calibrator. The correction factor from the Bradford method to Amino Acid Analysis is 65% for this protein.

Identity: Confirmed by peptide mapping

Purity: ≥95% (SDS-PAGE)

UniProt: P02652

Sequence Information
The C-terminal polyhistidine and FLAG tags are italicized.

QAKEPCVESLVSQYFQTVTDYGKDLMEKVKSPELQA
EAKSYFEKSKEQLTPLIKKAGTELVNFLSYFVELGTQP
ATQ*DYKDDDDKGHHHHHHHHHGGQ*

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile ultrapure water to a final concentration of 100 μg/mL.

Storage/Stability
Store the lyophilized product at –20 °C. The product is stable for at least 2 years as supplied. After reconstitution, it is recommended to store the protein in working aliquots at –20 °C.

References

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4. Martin-Campos, J.M. et al., Apolipoprotein A-II, genetic variation on chromosome 1q21-q24, and disease susceptibility. *Curr. Opin. Lipidol.,* **15**, 247–253 (2004).
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6. Dugue-Pujol, S. et al., Human apolipoprotein A-II associates with triglyceride-rich lipoproteins in plasma and impairs their catabolism. *J. Lip. Res.,* **47**, 2631–2639 (2006).
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