

## Product Information

### SILu™Lite APOD, Apolipoprotein D, human recombinant, expressed in HEK 293 cells MS Protein Standard

Catalog Number **MSST0062**

Storage Temperature  $-20^{\circ}\text{C}$

Synonyms: Apo-D, ApoD

#### Product Description

SILu™Lite APOD is a recombinant human protein expressed in human 293 cells. It consists of 189 amino acids (including C-terminal polyhistidine and FLAG® tags), with a calculated molecular mass of 21.69 kDa. SILu™Lite APOD is an analytical standard designed to be used as starting material for preparation of calibrators and controls in LC-MS applications.

Apolipoprotein D is a member of the Apolipoprotein family.<sup>1</sup> Unlike other lipoproteins, which are mainly produced in the liver, apolipoprotein D is primarily produced in the brain and testes.<sup>2</sup> It was found to be a putative biomarker of androgen receptor function in androgen insensitivity syndrome, the most common cause of disorders of sex development.<sup>3</sup> Apolipoprotein D is associated with neurological disorders and nerve injury, especially related to myelin sheath.<sup>2</sup> It was shown to be elevated in a rat model of stroke,<sup>2</sup> and is elevated in patients with schizophrenia, bipolar disorder, and Alzheimer's disease.<sup>2</sup>

Each vial contains 50 µg of SILu™Lite APOD standard, lyophilized from a solution of phosphate buffered saline. Vial content was determined by the Bradford method using BSA as a calibrator.

Purity:  $\geq 95\%$  (SDS-PAGE)

UniProt: P05090

#### Sequence Information:

The C-terminal polyhistidine and FLAG tags are italicized.

QAFHLGKCPNPPVQENFDVNKYLGRWYEIEKIPTTFF  
NGRCIQANYSLMENGKIKVLNQELRADGTVNQIEGEA  
TPVNLTEPAKLEVKFSWFMPSPAPYWILATDYENYALV  
YSCTCIIQLFHVDFAWILARNPNLPPETVDSLKNILTSN  
NIDVKKMTVTDQVNCPLSDYKDDDDKGHHHHHHH  
HGGQ

#### 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  $-20^{\circ}\text{C}$ . The product is stable for at least 2 years as supplied.

After reconstitution, it is recommended to store the protein in working aliquots at  $-20^{\circ}\text{C}$ .

#### References

1. Drayna, D. et al., Cloning and expression of human apolipoprotein D cDNA. *J. Biol. Chem.*, **261** (35), 16535–16539 (1987).
2. Muffat, J., and Walker, D.W., Apolipoprotein D: an overview of its role in aging and age-related diseases. *Cell Cycle*, **9** (2), 269–273 (2010).
3. Appari, M. et al., Apolipoprotein D (APOD) is a putative biomarker of androgen receptor function in androgen insensitivity syndrome. *J. Mol. Med. (Berl.)*, **87**(6), 623–632 (2009).

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NA,MAM 06/17-1