Human APP Protein, His Tag (active enzyme, MALS verified)

Catalog # APP-H52H3

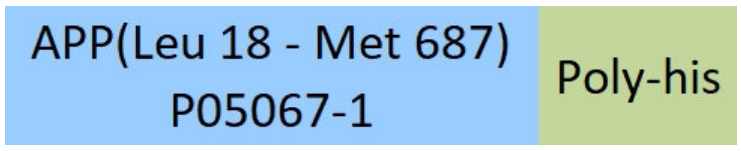
Synonym

ABPP,APPI,Amyloid-beta A4 protein

Source

Human APP Protein, His Tag(APP-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 18 - Met 687 (Accession # P05067-1).
Predicted N-terminus: Leu 18

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 77.9 kDa. The protein migrates as 95-130 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

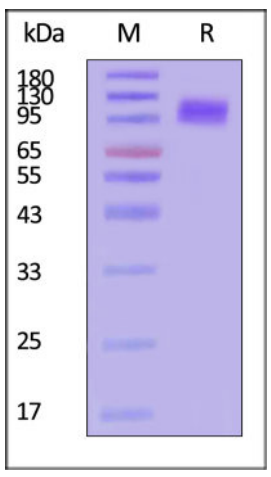
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

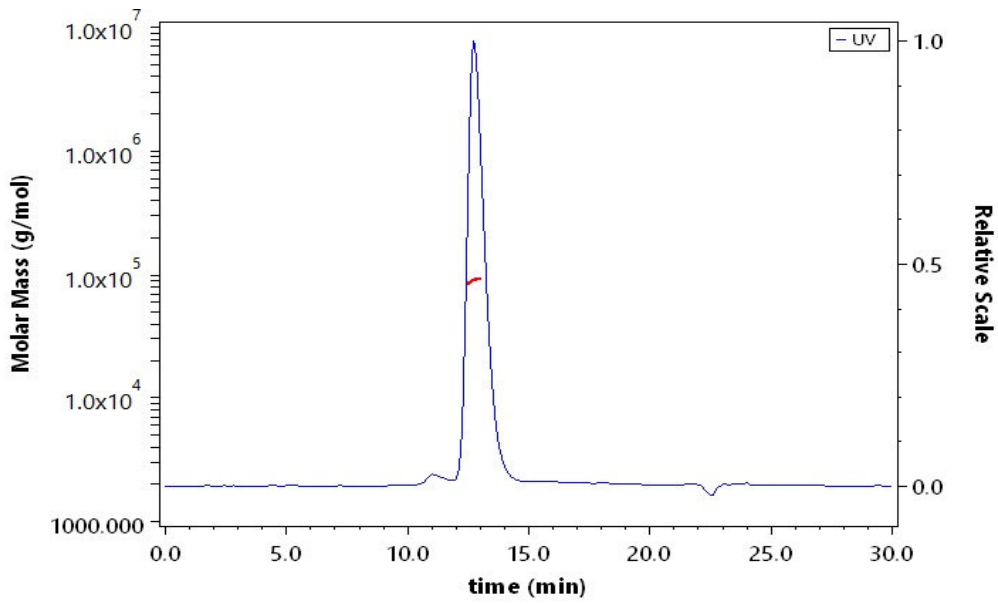
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human APP Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human APP Protein, His Tag (Cat. No. APP-H52H3) is more than 85% and the molecular weight of this protein is around 80-110 kDa verified by SEC-MALS.
Report

Bioactivity

Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2. The IC50 value is <0.8 nM

(QC tested).

Background

Amyloid precursor protein (APP) is a type I integral membrane protein ubiquitously expressed in many tissues and concentrated in the synapses of neurons. The majority of APP is cleaved at the plasma membrane by the α-secretase in the non-amyloidogenic pathway. The amyloidogenic pathway starts with β-secretase cleavage by BACE1 on the N-terminal part of the Aβ domain, releasing sAPPβ from a membrane-anchored fragment named βCTF or C103, which is subsequently cleaved by γ-secretase to release Aβ.