

## Synonym

ABPP, APPI, Amyloid-beta A4 protein

#### Source

Mouse N-APP, His Tag(APP-M52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 18 - Val 286 (Accession # P12023-1). Predicted N-terminus: Leu 18

# **Molecular Characterization**

APP(Leu 18 - Val 286) P12023-1

Poly-his

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

The protein has a calculated MW of 31.9 kDa. The protein migrates as 38-45 kDa 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.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

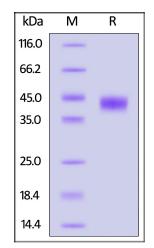
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

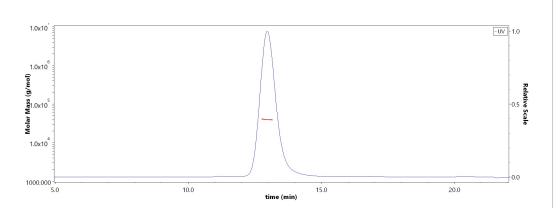
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Mouse N-APP, 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%.

## **SEC-MALS**



The purity of Mouse N-APP, His Tag (Cat. No. APP-M52H3) is more than 90% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.

<u>Report</u>

# 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  $\alpha$ -secretase in the non-amyloidogenic pathway. The amyloidogenic pathway starts with  $\beta$ -secretase



# Mouse APP / N-APP Protein, His Tag (MALS verified)





cleavage by BACE1 on the N-terminal part of the  $A\beta$  domain, releasing sAPP $\beta$  from a membrane-anchored fragment named  $\beta$ CTF or C102, which is subsequently cleaved by  $\gamma$ -secretase to release  $A\beta$ .

