Human APP / Abeta40 Protein, His Tag

Catalog # APP-H51H7

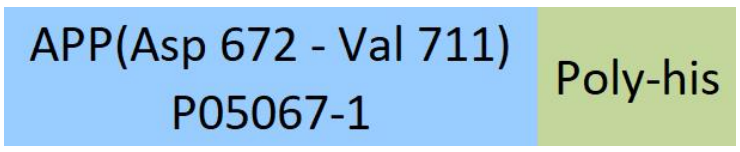
Synonym

ABPP,APPI,Amyloid-beta A4 protein

Source

Human Abeta40, His Tag(APP-H51H7) is expressed from E. coli cells. It contains AA Asp 672 - Val 711 (Accession # P05067-1).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 6.3 kDa. The protein migrates as 11 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.2 M Arginine, 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

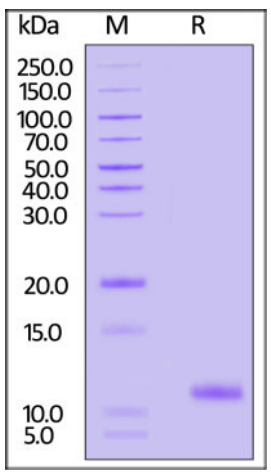
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

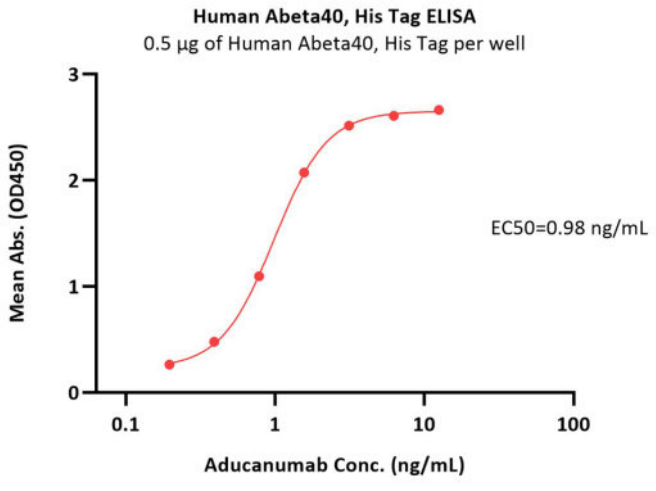
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Abeta40, 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%.

Bioactivity-ELISA



Immobilized Human Abeta40, His Tag (Cat. No. APP-H51H7) at 5 μg/mL (100 μL/well) can bind Aducanumab with a linear range of 0.2-2 ng/mL (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. It has three predominant splice variants: APP695, APP751, and APP770. 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 C99, which is subsequently cleaved by γ-secretase to release Aβ.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.