Human APP / Abeta40 (672-711) Protein, His Tag

Catalog # APP-H51H9

Synonym

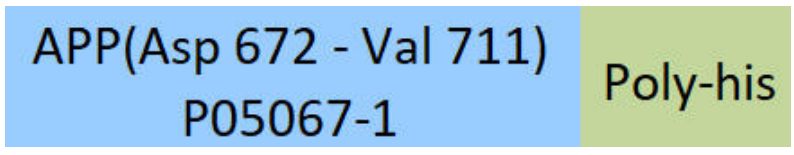
ABPP, APPI, Amyloid-beta A4 protein

Source

Human Abeta40 (672-711) Protein, His Tag (APP-H51H9) 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 9-10 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

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 20 mM NaOH 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.

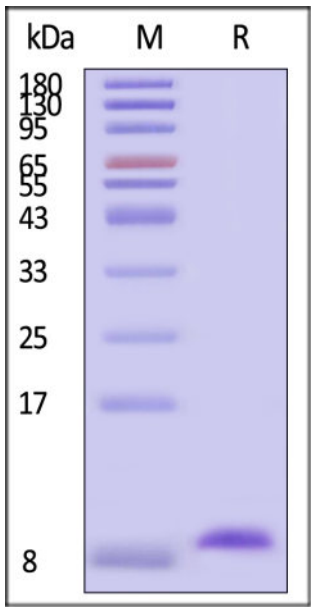
This product is stable after storage at:

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

ACRO Quality Management System

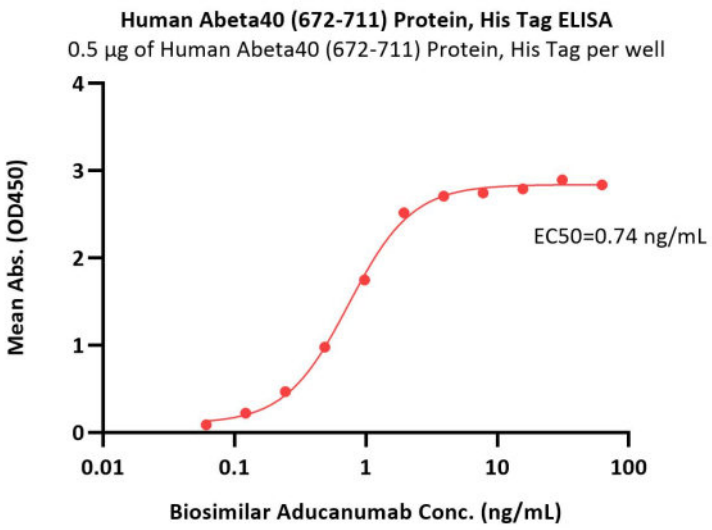
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



Human Abeta40 (672-711) 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).

Bioactivity-ELISA



Immobilized Human Abeta40 (672-711) Protein, His Tag (Cat. No. APP-H51H7) at 5 μg/mL (100 μL/well) can bind Biosimilar Aducanumab with a linear range of 0.06-2 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.