Amyloid β-Protein Fragment 1-42

Product Number A 9810
Storage Temperature -0 °C

Product Description
CAS Number: 107761-42-2

Amyloid β-protein is neurotrophic and neurotoxic.1 β-Amyloid peptides (amino acids 1-42 and 1-43) are the major constituents of senile plaques and neurofibrillary tangles that occur in the hippocampus, neocortex and amygdala of patients with Alzheimer's disease.2 β-Amyloid peptide fragments of 39-43 residues in length are the major components of amyloid plaques in Alzheimer's disease and late Down's Syndrome. The gene for this peptide is located on human chromosome 21.3


This peptide adopts a mixture of β-sheet, α-helix, and random coil structures. In aqueous solution the β-sheet conformation is preferred.4 The rate of aggregation to the oligomeric β-sheet structure characteristic of β-amyloid plaques is dependent on pH and on peptide concentration. The hydrophobic carboxy terminus of the peptide is critical for plaque formation.4 5

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in ammonium hydroxide, pH > 9, or in DMSO at 0.4 to 4 M.3 Solutions can then be diluted into aqueous buffers such as 10 mM sodium phosphate for use.

Storage/Stability
This product should be stored desiccated in the freezer. This product should be allowed to warm to room temperature in a desiccator prior to opening the vial.

References