

Beta-Amyloid (1-40)

Catalog Number: 81050

Unit Size: 1 mg

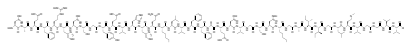
Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid white
Molecular Weight	4329.82
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Amyloid beta 1-40 (Aβ1-40) is a peptide fragment of the amyloid precursor protein (APP) that is a major component of amyloid plaques. It has the amino acid sequence of H-Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Glu-Asp-Val-Gly-Ser-Asn-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-OH (DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVV). It is one of the most abundant forms of amyloid beta and is present at higher physiological concentrations than the 1-42 form. While Aβ1-40 is less prone to forming plaques, it can still have neurotoxic effects at higher concentrations and is involved in vascular amyloid deposits. Aβ1-40 is produced by the cleavage of the amyloid precursor protein (APP) and is one of two major C-terminal variants, along with Aβ1-42. It is found in the extracellular plaques in the brains of Alzheimer's patients and is also the predominant form in vascular amyloid deposits. The blood-brain barrier removes Aβ1-40 through a transport system that is influenced by factors like age and apolipoprotein E and may be impaired in Alzheimer's disease. AAT Bioquest's FAM-beta-Amyloid (1-42) material is thoroughly analyzed to ensure its quality by HPLC, electrophoresis and cell functional analysis.