

Rev03
 Update: Feb,10,2022

DATASHEET

β-Amyloid (1-42), rat

Cat. No.: RP10013

Overview

Synonyms	Abeta 1-42, ratβ-Amyloid Peptide; βAmyloid Peptide; b-Amyloid Peptide; bAmyloid Peptide; beta-Amyloid Peptide; betaAmyloid Peptide
Description	Abeta 1-42 induces a strong membrane destabilization in giant unilamellar vesicles composed of palmitoyl-oleoyl-phosphatidylcholine, sphingomyelin, and cholesterol, lowering the critical tension of vesicle rupture. Additionally, Abeta 1-42 triggers the induction of sequential leakage of low- and high-molecular-weight markers trapped inside the giant unilamellar vesicles, but preserving the vesicle shape. The Abeta 1-42 sequence confers particular molecular properties to the peptide that, in turn, influence supramolecular properties associated with membranes that may result in toxicity, including: 1) the ability of the peptide to strongly associate with the membrane; 2) a reduction of lateral membrane cohesive forces; and 3) a capacity to break the transbilayer gradient and puncture sealed vesicles.
Sequence	{ASP}{ALA}{GLU}{PHE}{GLY}{HIS}{ASP}{SER}{GLY}{PHE}{GLU}{VAL}{ARG}{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}{ILE}{ALA}
Sequence Shortening	DAEFGHDSGFEVRHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
Molecular Formula	C ₁₉₉ H ₃₀₇ N ₅₃ O ₅₉ S ₁
Molecular Weight	4418.1

Properties

Purity	> 95%
Form	Lyophilized
Storage	Store at -20°C.