

DATASHEET

Version: 2016-08-18

β-Amyloid (1-42), rat

Cat. No.: RP10013-1

Size: 1 mg

Alias: Abeta 1-42, rat β -Amyloid Peptide; β Amyloid 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 palmitoyloleoyl-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 (one-letter code):

DAEFGHDSGFEVRHQKLVFFAEDVGSNKGAIIGLMVGGVVIA

Sequence (three-letter code):

 $\label{thm:conditional} $$ {ASP}_{ALA}_{GLU}_{PHE}_{GLY}_{HIS}_{ASP}_{SER}_{GLY}_{PHE}_{GLU}_{VAL}_{PHE}_{ALA}_{GLU}_{ASP}_{VAL}_{GLY}_{SER}_{ASN}_{LYS}_{GLY}_{ALA}_{ILE}_{ILE}_{GLY}_{CLY}_{CLY}_{VAL}_{ILE}_{ALA}_{ILE}_$

Formula: C₁₉₉H₃₀₇N₅₃O₅₉S₁ **Molecular Weight:** 4,418.1

Purity: > 95%

Storage:

Store at -20°C.

Note:

*For Non-Clinical Research Use Only *