followed by neuronal death.



**DATASHEET** 

Version: 2016-08-18

## β-Amyloid (1-40)

Cat. No.: RP10004-0.5

**Size:** 0.5 mg

Alias: amyloid peptide; amyloid beta protein; beta amyloid

plaques

## **Description:**

Beta-amyloid peptide (beta-APP) is a 40-residue peptide implicated in the pathogenesis of Alzheimer's disease (AD) and aged Down's Syndrome, which is promoted by the acquisition of an additional copy of chromosome 21. The peptide is a proteolytic product of the much larger amyloid precursor protein (APP) encoded by a gene on chromosome 21. The peptide comprises a large extracellular N-terminal domain and a short hydrophobic membrane-spanning domain, followed by a short C-terminal region. Beta-APP both precedes and forms part of the transmembrane region.

Cas No: 131438-79-4

## Sequence (one-letter code):

DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVV

## Sequence (three-letter code):

 $\label{eq:continuity} $$ {ASP}_{ALA}_{GLU}_{PHE}_{ARG}_{HIS}_{SER}_{GLY}_{TYR}_{GLU}_{VAL}_{HIS}_{HIS}_{GLN}_{LYS}_{LEU}_{VAL}_{PHE}_{ALA}_{GLU}_{ASP}$$ 

**Solubility:** Insoluble in water, may be dissolved in any buffer

of pH >9.

**Formula:** C<sub>194</sub>H<sub>295</sub>N<sub>53</sub>O<sub>58</sub>S<sub>1</sub> **Molecular Weight:** 4,329.82

**Purity:** > 95%

Storage:

Store at -20°C

**Note:** In culture, beta-amyloid peptide is neurotrophic to undifferentiated hippocampal neurons at low concentrations and neurotoxic to mature neurons at higher concentrations. In differentiated neurons, it causes dendritic and axonal retraction

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