

Amyloid beta-peptide (1-42) (rat)

PRODUCT DESCRIPTION

Amyloid beta-peptide (1-42) (rat) is a 42-amino-acid A synthetic peptide fragment of the amyloid beta-protein (Abeta), a 39-43 amino acid peptide that is the principal component of amyloid plaques in Alzheimer's disease. This fragment is widely used in neuroscience research to study Abeta aggregation, neurotoxicity, and the molecular mechanisms underlying Alzheimer's pathology. It serves as a valuable tool for investigating amyloid fibril formation, screening potential therapeutic agents, and elucidating structure-activity relationships within the Abeta sequence.

PRODUCT SPECIFICATIONS

Catalog Number	BPT2254
CAS Number	166090-74-0
Molecular Weight	4417.9393 Da
Molecular Formula	C199H307N53O59S1
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

DAEFGHDSGFVRHQKLVFFAEDVGSNKGAIIGLMVGGVVIA

Three-Letter Code:

H-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-OH

RESEARCH APPLICATIONS

Application	Neurotoxicity & Aggregation
Biomarker Target	Amyloid-beta / Tau
Research Area	Neuroscience
Sub-category	Neurodegeneration & Alzheimer's Disease

STORAGE & HANDLING

Storage Temperature	-20 deg C
Form	Lyophilized
Stability	Lyophilized product stable for 24 months at -20 deg C
Reconstitution	Reconstitute in sterile water or appropriate buffer
After Reconstitution	Aliquot and store at -20 to -80 deg C
Avoid	Repeated freeze-thaw cycles

AVAILABLE SIZES

Size Options	1 mg, 10 mg
Usage	Research use

QUALITY CONTROL

Purity Method	HPLC, Mass Spectrometry (MS)
Identity	Confirmed by ESI-MS or MALDI-TOF
Purity	Peak Area by HPLC >=95%
Documentation	Certificate of Analysis (CoA) available upon request