

[Gln22]-beta-Amyloid (1-40)

PRODUCT DESCRIPTION

[Gln22]-beta-Amyloid (1-40) is a 40-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    | BPT2196                              |
| Molecular Weight  | 4328.8068 Da                         |
| Molecular Formula | C194H296N54O57S1                     |
| Purity            | Peak Area by HPLC >=95%              |
| Form              | Lyophilized                          |
| Source            | Synthetic (Chemical Synthesis, SPPS) |
| Endotoxin         | N/A (Synthetic peptide)              |

AMINO ACID SEQUENCE

One-Letter Code:

DAEFRHDSGYEVHHQKLVFFAQDVGSNKGAIIGLMVGGVV

Three-Letter Code:

H-Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Gln-Asp-Val-Gly-Ser-Asn-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-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 |
|--------------|-------------|

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