Product Data Sheet

Product Name: [Lys^{22}]-β-Amyloid (1-42), Italian Mutation

Catalog Number: AS-62148 (0.5 mg) Lot Number: See label on vial

Sequence: H-Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Lys-Asp-Val-Gly-Ser-Asn-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-Ile-Ala-OH (3-letter code)
DAEFRHDSGYEVHHQKLVFFAKDVGSNKGAIIGLMVGGVVIA (1-letter code)

Molecular Weight: 4513.2

Peptide Purity: >95%

Appearance: Lyophilized white powder

Peptide Reconstitution: [Lys^{22}]-β-(1-42), Italian Mutation peptide is soluble in water.

Storage: [Lys^{22}]-β-Amyloid (1-42), Italian Mutation peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at –20°C or lower. Reconstituted peptide can be aliquoted and stored at –20°C or lower.

Description: This is amino acids 1 to 42 fragment of the β-Amyloid peptide, with lysine substituted for glutamic acid at position 22 found in Italian families with Alzheimer's disease. The Italian mutation of β-Amyloid (1-42) (E22K) aggregates more rapidly and with more potent neurotoxicity than wild-type β-Amyloid (1-42). The formation of a salt bridge between Lys^{22} and Asp^{23} in the minor confirmation might be a reason why E22K is more pathogenic than wild-type β-Amyloid (1-42). Ref: Masuda, Y. et al. *Bioorg. Med. Chem.* **13**, 6803 (2005).

Related Products:

Name	Cat #	Size
[Gly^{22}]-β-Amyloid (1-42), Arctic Mutation DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA	AS-61967-05	0.5 mg
[Gln^{22}]-β-Amyloid (1-42), E22Q Dutch Mutation DAEFRHDSGYEVHHQKLVFFAQDVGSNKGAIIGLMVGGVVIA	AS-62142	0.5 mg
[Gly^{21}]-β-Amyloid (1-42), A21G Flemish Mutation DAEFRHDSGYEVHHQKLVFFGEDVGSNKGAIIGLMVGGVVIA	AS-63704	0.5 mg
[Asn^{23}]-β-amyloid (1-42), Iowa Mutation DAEFRHDSGYEVHHQKLVFFAENVGSNKGAIIGLMVGGVVIA	AS-63705	0.5 mg

[Asn^{7}]-β-Amyloid (1-42), Tottori-Japanese Mutation DAEFRHNSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA	AS-63324	0.5 mg
[Arg^{6}]-β-Amyloid (1-42), English Mutation DAEFRRDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA	AS-63323	0.5 mg

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