



Product Data Sheet

Product Name:	β -Amyloid (1-16)	
Catalog Number:	24225 (1 mg) 24226 (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-OH (3-letter code) DAEFRHDSGYEVHHQK (1-letter code)	
Molecular Weight:	1955.0	
Peptide Purity:	>95%	
Appearance:	Lyophilized white powder	

Peptide Reconstitution: β -Amyloid (1-16) peptide is freely soluble in water.

Storage: β -Amyloid (1-16) 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: Proteins interactions with reactive oxygen agents may result in covalent modifications of amino acid residues in proteins, formation of protein-protein cross-linkages and oxidation of the protein backbone resulting in protein fragmentation. Oxidation targets for $\text{A}\beta$ (1-16) are the histidine residues coordinated to the metal ions. Copper is bound to $\text{A}\beta$ in senile plaque of Alzheimer's disease with $\text{A}\beta$ (1-16) taking part in the coordination of the Cu^{2+} ions. Cu^{2+} and Zn^{2+} are linked with the neurotoxicity of $\text{A}\beta$ and free radical damage. Ref: Da Silva, GFZ. et al. J. Biol. Chem. **280**, 16601 (2005); Kowalik-Jankowska, T. et al. J. Inorg. Biochem. **98**, 940 (2004); Kowalik-Jankowska, T. et al. J. Inorg. Biochem. **95**, 270 (2003).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

The synthetic peptides $\text{AChE}_{586-599}$ (AEFHRWSSYMVHWK), $\text{A}\beta_{1-16}$ (DAEFRHDSGYEVHHQK) and $\text{A}\beta_{1-40}$ (DAEFRHDSGYEVHHQKLFFF) were purchased from Anaspec. Peptides were dissolved in ultrapure water, and diluted into buffer (0.1 M sodium acetate pH 3.0 or 0.1 M sodium phosphate pH 7.0 for $\text{AChE}_{586-599}$ and 0.1 M Tris pH 7.0 for $\text{A}\beta$ peptides). Detergents were diluted in ultrapure water- [Cottingham, MG. et al. Lab. Inves. **84**, 523 \(2004\)](#)

Published Citations:

Cottingham, MG. et al. *Lab. Inves.* **84**, 523 (2004)
Osada, Y. et al. *J. Biol. Chem.* **280**, 8596 (2005).
Minicozzi, V. et al. *J. Biol. Chem.* 10.1074/jbc.M707109200 (2008).

Related Products:

Name	Cat #	Size
Biotin-LC- β -Amyloid (1-16) Biotin-LC-DAEFRHDSGYEVHHQK	62458	1 mg
Biotin- β -Amyloid (1-16) Biotin-DAEFRHDSGYEVHHQK	62457	1 mg
β -Amyloid (1-16)-Lys(Biotin-LC)-NH ₂ DAEFRHDSGYEVHHQK-K(Biotin-LC)-NH ₂	62136	1 mg
β -Amyloid (1-16), HiLyte Fluor™ 555-labeled HiLyte Fluor™ 555-DAEFRHDSGYEVHHQK	63330	0.1 mg
β -Amyloid (1-16)-Cys DAEFRHDSGYEVHHQKC	63746	1 mg
[Gln11]- β -Amyloid (1-16) DAEFRHDSGYQVHHQK	25368 25369	0.5 mg 1 mg
β -Amyloid (1-16), mouse, rat DAEFGHDSGFVRRHQK-NH ₂	60889-1 60889-5	1 mg 5 mg

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