

Product Data Sheet

Product Name: Scrambled-β-Amyloid (1-42)

Catalog Number: AS-25382 (0.5 mg) Lot Number: See label on vial

AS-25383 (1 mg)

Sequence: H-Ala-Ile-Ala-Glu-Gly-Asp-Ser-His-Val-Leu-Lys-Glu-Gly-Ala-Tyr-Met-Glu-

Ile-Phe-Asp-Val-Gln-Gly-His-Val-Phe-Gly-Gly-Lys-Ile-Phe-Arg-Val-Val-

Asp-Leu-Gly-Ser-His-Asn-Val-Ala-OH (3-letter code)

AIAEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSHNVA

(1-letter code)

Molecular Weight: 4515.1 % Peak Area by HPLC: ≥ 95

Appearance: Lyophilized white powder

Peptide Reconstitution: Reconstitute by adding 80-100 μl 1%NH₄OH to 1 mg Scrambled-β-Amyloid peptide. Dilute this peptide solution to approximately 1 mg/ml (or more dilute) with a buffer such as PBS or another buffer; aliquot and store at -20C.

Storage: Scrambled- β -Amyloid 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.

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.

 β -Amyloid peptides (A β_{1-42} and a scrambled peptide with the same amino acid composition) were purchased from AnaSpec (San Jose, CA). Hippocampal neurons [6 d *in vitro* (div)] were treated with 10 nM, 100 nM, or 1 μ M A β_{1-42} in the form of low-molecular weight (LMW) species, large oligomers, and fibrils/insoluble aggregates for 0.5–72 h. Controls included untreated neurons or neurons treated with 0.5% DMSO (vehicle) or with 1 μ M scrambled A β peptide that had been preincubated under conditions in which A β_{1-42} forms fibrils-Maloney, MT. et al. *J. Neurosci.* **25**, 11313 (2005).

Scrambled A β 42 (Anaspec, San Jose, CA, USA) was also spotted to determine background, nonspecific binding values for each probe. Radioactivity was quantified in a scintillation counter. The amount of specific binding was calculated by subtracting the radioactivity of the scrambled A β 42 spot from the A β 42 spot for each probe-Shaked, GM. et al. FASEB J. 20, 1254 (2006).

Treatments of SH-SY5Y and SKNBE(2c) with A β peptides (1–40, 1–42 scramble, and 1-42, Anaspec, San Jose, CA) were started 16–18 h after plating the cells in serum-free medium. Primary neuronal cultures were treated likewise at 14 or 21DIV. The lyophilized commercial peptides were dissolved as a stock solution in 1,1,1,3,3,3-hexafluoro-2-propanol (Sigma) and stored at –80 °C in aliquots. The desired amount was left under the cell culture hood to allow for 1,1,1,3,3,3-hexafluoro-2-propanol to evaporate and brought to 1 μ M with sterile double-distilled water-Giliberto, L. et al. *J. Biol. Chem.* **284**, 9027 (2009)

Published Citations:

Kumar-Singh, S. et al. *Neurobio. Dis.* **11**, 330 (2002). Lue, LF. And DG. Walker *J. Neurosci. Res.* **70**, 599 (2002). Maloney, MT. et al. *J. Neurosci.* **25**, 11313 (2005). Puzzo, D. et al. *J. Neurosci.* **25**, 6887 (2005). Shaked, GM. et al. *FASEB J.* **20**, 1254 (2006). Puzzo, D. et al. *J. Neurosci.* **28**, 14537 (2008). Garcia-Osta, A. & CM, Alberini, *Learn. Mem.* **16**, 267 (2009). Giliberto, L. et al. *J. Biol. Chem.* **284**, 9027 (2009). Hoos, MD. et al. *Biochem.* **48**, 4720 (2009).

Related Products:

Name	Cat #	Size
Scrambled-β-Amyloid (1-42), 5-FAM labeled, Abs/Em=492/518 nm (5-FAM-AIAEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSHNVA)	AS-60892	0.1 mg
Scrambled-β-Amyloid (1-40) (AEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSHNVA)	AS-24625 AS-24626	0.5 mg 1 mg
Scrambled-β-Amyloid (25-35) (MAKGINGISGL)	AS-61971	1 mg
β-Amyloid (1-42) (DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA)	AS-24224 AS-20276 AS-20276-5 AS-20276-25	0.5 mg 1 mg 5 mg 25 mg

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