



## Product Data Sheet

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**Product Name:** Scrambled- $\beta$ -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)  
AIAEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSNHVA (1-letter code)  
**Molecular Weight:** 4515.1  
**% Peak Area by HPLC:**  $\geq 95$   
**Appearance:** Lyophilized white powder

**Peptide Reconstitution:** Reconstitute by adding 80-100  $\mu$ l 1%  $\text{NH}_4\text{OH}$  to 1 mg Scrambled- $\beta$ -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  $-20^\circ\text{C}$ .

**Storage:** Scrambled- $\beta$ -Amyloid peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at  $-20^\circ\text{C}$  or lower. Reconstituted peptide can be aliquoted and stored at  $-20^\circ\text{C}$  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.*

$\beta$ -Amyloid peptides ( $\text{A}\beta_{1-42}$  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  $\mu\text{M}$   $\text{A}\beta_{1-42}$  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  $\mu\text{M}$  scrambled  $\text{A}\beta$  peptide that had been preincubated under conditions in which  $\text{A}\beta_{1-42}$  forms fibrils-[Maloney, MT. et al. J. Neurosci. 25, 11313 \(2005\).](#)

Scrambled  $\text{A}\beta_{42}$  (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  $\text{A}\beta_{42}$  spot from the  $\text{A}\beta_{42}$  spot for each probe-[Shaked, GM. et al. FASEB J. 20, 1254 \(2006\).](#)

Treatments of SH-SY5Y and SKNBE(2c) with  $\text{A}\beta$  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  $-80^\circ\text{C}$  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  $\mu\text{M}$  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- $\beta$ -Amyloid (1-42), 5-FAM labeled, Abs/Em=492/518 nm<br>(5-FAM-AIAEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSHNVA) | AS-60892  | 0.1 mg                          |
| Scrambled- $\beta$ -Amyloid (1-40)<br>(AEGDSHVLKEGAYMEIFDVQGHVFGGKIFRVVDLGSHNVA)   | AS-24625<br>AS-24626                              | 0.5 mg<br>1 mg                  |
| Scrambled- $\beta$ -Amyloid (25-35)<br>(MAKGINGISGL)   | AS-61971  | 1 mg                            |
| $\beta$ -Amyloid (1-42)<br>(DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA)  | AS-24224<br>AS-20276<br>AS-20276-5<br>AS-20276-25 | 0.5 mg<br>1 mg<br>5 mg<br>25 mg |

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