



# SZABO SCANDIC

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## β-Amyloid (1-42), human

<b>Cat. No.:</b>	HY-P1363A	
<b>CAS No.:</b>	107761-42-2	
<b>Molecular Formula:</b>	C <sub>203</sub> H <sub>311</sub> N <sub>55</sub> O <sub>60</sub> S	Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-
<b>Molecular Weight:</b>	4514.04	Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-
<b>Sequence:</b>	Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Glu-Asp-Val-Gly-Ser-Asn-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-Ile-Ala	Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-Ile-Ala
<b>Sequence Shortening:</b>	DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA	
<b>Target:</b>	Amyloid-β	
<b>Pathway:</b>	Neuronal Signaling	
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.	

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 5 mg/mL (1.11 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.2215 mL	1.1077 mL	2.2153 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

β-Amyloid (1-42), human (Amyloid β-peptide (1-42), human) is a 42-amino acid peptide which plays a key role in the pathogenesis of Alzheimer disease<sup>[1][2][3]</sup>.

#### In Vitro

β-Amyloid Aggregation Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).

1. Solid Aβ peptide was dissolved in cold hexafluoro-2-propanol (HFIP). The peptide was incubated at room temperature for at least 1h to establish monomerization and randomization of structure.
2. The HFIP was removed by evaporation, and the resulting peptide was stored as a film at -20 or -80°C.
3. The resulting film was dissolved in anhydrous DMSO at 5 mM and then diluted into the appropriate concentration and buffer (serum- and phenol-red-free culture medium) with vortexing.
4. Next, the solution was age 48h at 4-8°C. The sample was then centrifuged at 14000g for 10 min at 4-8°C; the soluble oligomers were in the supernatant. The supernatant was diluted 10-200-fold for experiments.

Methods vary depends on the downstream applications.

Note:

	The aggregation form is unstable in the solution, it is recommended to use it immediately. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	$\beta$ -Amyloid (1-42), human can be used in animal modeling to construct Alzheimer's disease models.  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Eur J Med Chem. 15 December 2022, 114841.
- Am J Physiol Cell Physiol. 2024 Apr 8.
- Aging. 2021 Jun 9;13(11):15569-15579.
- Front Aging Neurosci. 2022 Apr 25;14:890134.
- J Alzheimers Dis. 2022;85(1):167-178.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Solntseva EI, et al. Impact of amyloid- $\beta$  peptide (1-42) on voltage-gated ion currents in molluscan neurons. Bull Exp Biol Med. 2011 Oct;151(6):671-4.
- [2]. Barucker C, et al. Nuclear translocation uncovers the amyloid peptide A $\beta$ 42 as a regulator of gene transcription. J Biol Chem. 2014 Jul 18;289(29):20182-91.
- [3]. Stefania Sabella, et al. Capillary electrophoresis studies on the aggregation process of beta-amyloid 1-42 and 1-40 peptides. Electrophoresis. 2004 Oct;25(18-19):3186-94.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA