

PRODUCT INFORMATION



Biotin-Amyloid- β (1-28) Peptide (human) (trifluoroacetate salt)

Item No. 27109

Formal Name:	L- α -aspartyl-L-alanyl-L- α -glutamyl-L-phenylalanyl-L-arginyl-L-histidyl-L- α -aspartyl-L-serylglycyl-L-tyrosyl-L- α -glutamyl-L-valyl-L-histidyl-L-histidyl-L-glutamyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-alanyl-L- α -glutamyl-L- α -aspartyl-L-valylglycyl-L-seryl-L-asparaginyl-L-lysine, trifluoroacetate salt	Biotin — 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 — OH • XCF ₃ COOH
Synonyms:	Biotin-A β (1-28), Biotin-A β 28	
MF:	C ₁₅₅ H ₂₂₃ N ₄₃ O ₄₈ S • XCF ₃ COOH	
FW:	3,488.8	
Purity:	≥95%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Biotin-amyloid- β (1-28) peptide (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the biotin-amyloid- β (1-28) peptide (human) (trifluoroacetate salt) in water. The solubility of biotin-amyloid- β (1-28) peptide (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Biotin-amyloid- β (1-28) peptide is a biotinylated peptide. Amyloid- β (1-28) (A β 28) is a synthetic peptide that lacks 14 C-terminal amino acids and is more soluble than A β 42.¹ A β 28 forms fibrils and plaques *in vitro* that are similar to those formed by A β 42 and induces learning deficits in a passive avoidance task in rats.²⁻⁴ Biotin-amyloid- β (1-28) peptide is comprised of A β 28 conjugated to biotin (Item No. 22582) at its amino terminus.

References

1. Syme, C.D., Nadal, R.C., Rigby, S.E., *et al.* Copper binding to the amyloid-beta (A β) peptide associated with Alzheimer's disease. Folding, coordination geometry, pH dependence, stoichiometry, and affinity of A β (1-28): Insights from a range of complementary spectroscopic techniques. *J. Biol. Chem.* **279**(18), 18169-18177 (2004).
2. Kirschner, D.A., Inouye, H., Duffy, L.K., *et al.* Synthetic peptide homologous to β protein from Alzheimer disease forms amyloid-like fibrils *in vitro*. *Proc. Natl. Acad. Sci. U.S.A.* **84**(19), 6953-6957 (1987).
3. Burdick, D., Soreghan, B., Kwon, M., *et al.* Assembly and aggregation properties of synthetic Alzheimer's A4/ β amyloid peptide analogs. *J. Biol. Chem.* **267**(1), 546-554 (1992).
4. Alvarez, X.A., Miguel-Hidalgo, J.J., Fernández-Novoa, L., *et al.* Intrahippocampal injections of the beta-amyloid 1-28 fragment induces behavioral deficits in rats. *Methods Find. Exp. Clin. Pharmacol.* **19**(7), 471-479 (1997).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/30/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM