

Human Amyloid- β (1-42) Peptide (Trifluoroacetate Salt)



Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Neurotoxic peptide fragment

Catalog #100-0899

0.5 mg

Product Description

Human Amyloid- β (1-42) Peptide is a neurotoxic peptide fragment that can oligomerize to form amyloid plaques, thus contributing to the onset of Alzheimer's disease (Paradis et al.; Teplow; Wolfe). These neurotoxic peptide fragments also modulate the expression of Bcl-2 and Bax in human neurons (Paradis et al.).

NOTE: Human Amyloid- β (1-42) Peptide oligomers and fibrils are considered neurotoxic. Please contact your workplace safety committee for guidance before planning any work using Human Amyloid- β (1-42) Peptide.

Product Information

Alternative Names:	A β (1-42); A β 42
Peptide Sequence:	DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
Predicted Molecular Mass:	4514.0 g/mol
Species:	Human
Formulation:	Lyophilized from a solution containing trifluoroacetate salts.
Source:	Synthetic
Purity:	\geq 95%

Preparation and Storage

Storage:	Store at -20°C.
Stability:	Stable as supplied for until expiry date (EXP) on label.
Preparation:	For recommendations on preparing Amyloid- β (1-42) Peptide for culture, contact us at techsupport@stemcell.com .

Published Applications

DISEASE MODELING

- Induces neuronal death in human neurons in vitro and in vivo (Paradis et al.).
- Increases production of TNF- α in rat astrocytes (Hughes et al.).

References

- Hughes C et al. (2020) Beta amyloid aggregates induce sensitised TLR4 signalling causing long-term potentiation deficit and rat neuronal cell death. *Commun Biol* 3(1): 79.
- Paradis E et al. (1996) Amyloid beta peptide of Alzheimer's disease downregulates Bcl-2 and upregulates bax expression in human neurons. *J Neurosci* 16(23): 7533–9.
- Teplow DB. (2006) Preparation of amyloid beta-protein for structural and functional studies. *Methods Enzymol* 413: 20–33.
- Wolfe MS. (2002) Therapeutic strategies for Alzheimer's disease. *Nat Rev Drug Discov* 1(11): 859–66.

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2021 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.