

Amyloid 17-42

Cat. No.:	HY-P3779
CAS No.:	155178-13-5
Molecular Formula:	C ₁₁₉ H ₁₉₄ N ₂₈ O ₃₃ S
Molecular Weight:	2577.05
Sequence Shortening:	LVFFAEDVGSNKGAIIGLMVGGVIA
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Amyloid 17-42 (A β (17-42)) is a major constituent of diffuse plaques in Alzheimer's disease and cerebellar pre-amyloid in Down's syndrome, derived by alpha- and gamma-secretase cleavage of the amyloid precursor protein (APP). Amyloid 17-42 can induce neuronal apoptosis via a Fas-like/caspase-8 activation pathway ^[1] .																		
In Vitro	<p>Amyloid 17-42 (20 μM; 48 h) leads to apoptosis in SH-SY5Y and IMR-32 cells^[1].</p> <p>Amyloid 17-42 (20 μM; 48 h, 72 h) activates caspase-8 and caspase-3, induced poly(ADP-ribose) polymerase cleavage^[1].</p> <p>Amyloid 17-42 (20 μM) moderately activates c-Jun N-terminal kinase (JNK)^[1].</p> <p>Amyloid 17-42 induces neuronal apoptosis via a Fas-like/caspase-8 activation pathway^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SH-SY5Y and IMR-32 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-30 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Caused the death of SH-SY5Y and IMR-32 human neuroblastoma cells.</td> </tr> </table> <p>Apoptosis Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SH-SY5Y cells</td> </tr> <tr> <td>Concentration:</td> <td>20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Showed shrunken cell bodies, condensed and fragmented chromatin, and increased amounts of cytoplasmic oligonucleosomes.</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SH-SY5Y cells</td> </tr> </table>	Cell Line:	SH-SY5Y and IMR-32 cells	Concentration:	0-30 μ M	Incubation Time:	48 h	Result:	Caused the death of SH-SY5Y and IMR-32 human neuroblastoma cells.	Cell Line:	SH-SY5Y cells	Concentration:	20 μ M	Incubation Time:	48 h	Result:	Showed shrunken cell bodies, condensed and fragmented chromatin, and increased amounts of cytoplasmic oligonucleosomes.	Cell Line:	SH-SY5Y cells
Cell Line:	SH-SY5Y and IMR-32 cells																		
Concentration:	0-30 μ M																		
Incubation Time:	48 h																		
Result:	Caused the death of SH-SY5Y and IMR-32 human neuroblastoma cells.																		
Cell Line:	SH-SY5Y cells																		
Concentration:	20 μ M																		
Incubation Time:	48 h																		
Result:	Showed shrunken cell bodies, condensed and fragmented chromatin, and increased amounts of cytoplasmic oligonucleosomes.																		
Cell Line:	SH-SY5Y cells																		

Concentration:	20 μ M
Incubation Time:	48, 72 h; 18 h, 24 h
Result:	Reduced procaspase-3 and increased cleaved caspase-3 in cells. Reduced procaspase-8 in cells. Lead to early activation of JNK.

REFERENCES

[1]. Wanli Wei, et al. Abeta 17-42 in Alzheimer's disease activates JNK and caspase-8 leading to neuronal apoptosis. Brain. 2002 Sep;125(Pt 9):2036-43.

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

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