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Data Sheet

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Product Name	:	Colivelin TFA
Cat. No.	:	PC-25392
CAS No.	:	2803948-60-7
Molecular Formula	:	$C_{119}H_{206}N_{32}O_{35}.C_2HF_3O_2$
Molecular Weight	:	2759.13
Target	:	STAT
Solubility	:	10 mM in DMSO

L-seryl-L-alanyl-L-leucyl-L-leucyl-L-arginyl-L-seryl-L-isoleucyl-L-prolyl-L-alar
L-prolyl-L-alanylglycyl-L-alanyl-L-seryl-L-arginyl-L-leucyl-L-leucyl-L-leucyl-L-
L-threonylglycyl-L-alpha-glutamyl-L-isoleucyl-L-alpha-aspartyl-L-leucyl-L-Pr

CAS: 2803948-60-7

Biological Activity

Colivelin TFA is a femtomolar-acting humanin derivative, hybrid neuroprotective peptide and potent activator of STAT3, suppresses neuronal death induced by insults related to Alzheimer's disease (AD) by activating STAT3 in vitro.
Colivelin is composed of activity-dependent neurotrophic factor (ADNF) C-terminally fused to AGA-(C8R)HNG17.
Colivelin completely suppresses death induced by overexpressed FAD-causative genes and Abeta1-43 at a concentration of 100 fM.
Colivelin-induced neuroprotection has been confirmed to occur via two neuroprotective pathways: one mediated by Ca2+/calmodulin-dependent protein kinase IV, triggered by ADNF, and one mediated by STAT3, triggered by humanin (HN).
Colivelin not only completely suppresses impairment in spatial working memory induced by repetitive intracerebroventricular injection of Abeta25-35 or Abeta1-42, but also it antagonizes neuronal loss in the CA1 region of hippocampus induced by hippocampal injection of Abeta1-42.

References

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