Data Sheet (Cat.No.TN6725)

TargetMol

3′,6-Disinapoylsucrose

Chemical Properties

CAS No. :	76656-80-9
Formula:	C34H42O19
Molecular Weight:	754.69
Storage:	Keep away from moisture,Keep away from direct sunlight, Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	3′,6-Disinapoylsucrose exerts anti-aging effects via modification of telomeres, SIRT1/p53/p21 pathway, oxidative stress and autophagy. 3′,6-Disinapoylsucroseis studied in cellular aging and stress-response research models focusing on telomere-associated signaling, SIRT1/p53/p21 axis modulation, oxidative stress regulation, and autophagy pathways. 3′,6-Disinapoylsucrose is therefore applied in experimental gerontology and cellular homeostasis research systems to evaluate molecular markers of senescence, stress adaptation, and autophagy flux in in vitro and in vivo model systems.
Targets(IC50)	p53,Sirtuin
In vivo	Method:APP/PS1 transgenic mice were used to evaluate the neuroprotective effects of 3,6'-disinapoyl sucrose (3′,6-Disinapoylsucrose (DISS)) using behavioral tests, hippocampal histology (Nissl, TUNEL), ELISA for inflammatory markers, and Western blot for signaling proteins. Result:3′,6-Disinapoylsucrose (DISS) significantly improved learning and memory deficits in APP/PS1 mice. It reduced neuronal apoptosis (decreased Bax/Bcl-2 ratio) and restored inflammatory cytokine levels (IL-2, TNF-α, IL-1β, IL-6). High-dose 3′,6-Disinapoylsucrose (DISS) increased CREB and BDNF expression in the hippocampus.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.325 mL	6.6252 mL	13.2505 mL
5 mM	0.265 mL	1.325 mL	2.6501 mL
10 mM	0.1325 mL	0.6625 mL	1.325 mL
50 mM	0.0265 mL	0.1325 mL	0.265 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Jiaqi Yuan, et al. 3,6'-Disinapoyl sucrose alleviates cognitive deficits in APP/PS1 transgenic mice. J Neurophysiol. 2023 Nov 1;130(5):1174-1182.
Jie Zhang, et al. Anxiolytic effects, metabolism and plasma pharmacokinetics of 3, 6' -disinapoylsucrose. Biomed Pharmacother. 2022 May:149:112913.