

PRODUCT INFORMATION

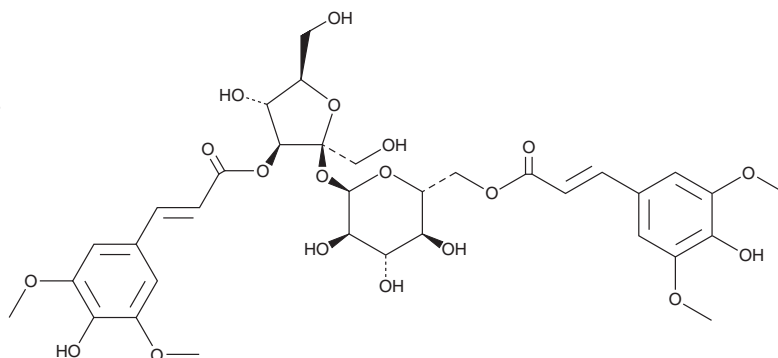


3,6'-Disinapoysucrose

Item No. 35640

CAS Registry No.: 139891-98-8
Formal Name: 3-O-[(2E)-3-(4-hydroxy-3,5-dimethoxyphenyl)-1-oxo-2-propen-1-yl]-β-D-fructofuranosyl α-D-glucopyranoside 6-[(2E)-3-(4-hydroxy-3,5-dimethoxyphenyl)-2-propenoate]

Synonym: DISS
MF: C₃₄H₄₂O₁₉
FW: 754.7
Purity: ≥98%
UV/Vis.: λ_{max}: 240, 333 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Polygala tenuifolia*



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

Laboratory Procedures

3,6'-Disinapoysucrose is supplied as a solid. A stock solution may be made by dissolving the 3,6'-disinapoysucrose in the solvent of choice, which should be purged with an inert gas. 3,6'-Disinapoysucrose is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 3,6'-disinapoysucrose in ethanol and DMSO is approximately 10 mg/ml and approximately 25 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 3,6'-disinapoysucrose can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3,6'-disinapoysucrose in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3,6'-Disinapoysucrose is an oligosaccharide ester that has been found in *P. tenuifolia* and has antidepressant- and anxiolytic-like activities.^{1,2} It prevents increases in serum cortisol levels, serum superoxide dismutase (SOD) activity, and brain monoamine oxidase A (MAO-A) and MAO-B levels, as well as decreases serum malondialdehyde (MDA) levels, in a rat model of chronic mild stress.¹ 3,6'-Disinapoysucrose (20 mg/kg) increases sucrose consumption in the sucrose preference test, indicating antidepressant-like activity, in the same model. It increases the number of entries into and percentage of time spent in the open arms of the elevated plus maze in mice, indicating anxiolytic-like activity, when administered at doses ranging from 3 to 12 mg/kg.²

References

1. Hu, Y., Liu, M., Liu, P., et al. Possible mechanism of the antidepressant effect of 3,6'-disinapoysucrose from *Polygala tenuifolia* Willd. *J. Pharm. Pharmacol.* **63**(6), 869-874 (2011).
2. Zhang, J., Xie, J., Liang, Y., et al. Anxiolytic effects, metabolism and plasma pharmacokinetics of 3,6'-disinapoysucrose. *Biomed. Pharmacother.* **149**, 112913 (2022).

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, 06/05/2023

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