

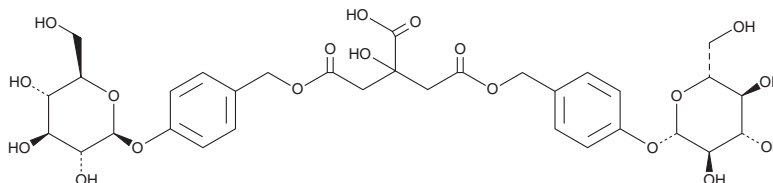
PRODUCT INFORMATION



Parishin C

Item No. 25127

CAS Registry No.: 174972-80-6
Formal Name: 3-carboxy-3-hydroxy-1,5-dioxo-1,5-pentanediyldis(oxymethylene-4,1-phenylene) bis-β-D-glucopyranoside
MF: C₃₂H₄₀O₁₉
FW: 728.7
Purity: ≥95%
UV/Vis.: λ_{max}: 224, 270 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Parishin C is supplied as a crystalline solid. A stock solution may be made by dissolving the parishin C in the solvent of choice, which should be purged with an inert gas. Parishin C is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of parishin C in ethanol and DMF is approximately 20 mg/ml and approximately 25 mg/ml in DMSO.

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 parishin C can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of parishin C in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Parishin C is a phenolic glycoside and a major component of *G. elata*.^{1,2} It prevents inhibition of NMDA receptor (NMDAR) currents induced by amyloid-β (1-42) (Aβ₄₂) in rat hippocampal neurons when used at a concentration of 2 μM.¹ *In vivo*, parishin C (20 mg/kg) prevents Aβ₄₂-induced inhibition of long-term potentiation (LTP) in rats. Parishin is an agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} (K_i = 1.54 nM; EC₅₀ = 34 nM for [³⁵S]GTPγS binding) that reverses phencyclidine-induced increases in immobility time in the forced swim test, phencyclidine-induced decreases in interaction time in the social interaction test, and phencyclidine-induced impairments in visual recognition of a novel object in mice.²

References

1. Liu, Z., Wang, W., Feng, N., *et al.* Parishin C's prevention of Aβ₁₋₄₂-induced inhibition of long-term potentiation is related to NMDA receptors. *Acta. Pharm. Sin. B* **6**(3), 189-197 (2016).
2. Shin, E.-J., Whang, W.K., Kim, S., *et al.* Parishin C attenuates phencyclidine-induced schizophrenia-like psychosis in mice: Involvements of 5-HT_{1A} receptor. *J. Pharmacol. Sci.* **113**(4), 404-408 (2010).

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, 12/19/2022

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