

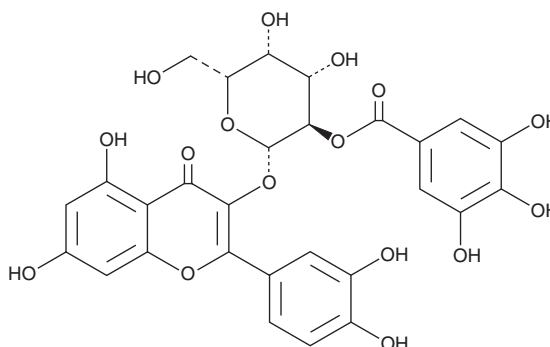
PRODUCT INFORMATION



2''-O-Galloylhyperin

Item No. 29086

CAS Registry No.: 53209-27-1
Formal Name: 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-3-[[2-O-(3,4,5-trihydroxybenzoyl)-β-D-galactopyranosyl]oxy]-4H-1-benzopyran-4-one
Synonym: Hyperin-2''-Gallate
MF: C₂₈H₂₄O₁₆
FW: 616.5
Purity: ≥98%
UV/Vis.: λ_{max}: 260, 360 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Pyrola calliantha*



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

Laboratory Procedures

2''-O-Galloylhyperin is supplied as a crystalline solid. A stock solution may be made by dissolving the 2''-O-galloylhyperin in the solvent of choice, which should be purged with an inert gas. 2''-O-Galloylhyperin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2''-O-galloylhyperin in these solvents is approximately 30 mg/ml.

2''-O-Galloylhyperin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2''-O-galloylhyperin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 2''-O-Galloylhyperin has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2''-O-Galloylhyperin is a natural flavonoid that has been found in *P. incarnata* and has diverse biological activities, including antioxidant, anti-inflammatory, hepatoprotective, and transporter-inhibiting properties.¹⁻³ It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) and ABTS (Item No. 27317) radicals (IC₅₀s = 3 and 3.5 μM, respectively).¹ It also inhibits human organic anion transporting polypeptide 1B1 (OATP1B1; IC₅₀ = 19 μM in HEK293 cells).² 2''-O-Galloylhyperin (15 μM) decreases LPS-induced IL-6 and TNF-α cytokine production from mouse RAW 264.7 macrophages.³ It also decreases LPS-induced mortality and liver damage in a mouse model of septic shock when administered at a dose of 50 mg/kg.

References

1. Chen, B., Li, X., Liu, J., *et al.* Antioxidant and cytoprotective effects of *Pyrola decorata* H. Andres and its five phenolic components. *BMC Complement. Altern. Med.* **19(1):275** (2019).
2. Wu, L.-X., Guo, C.-X., Qu, Q., *et al.* Effects of natural products on the function of human organic anion transporting polypeptide 1B1. *Xenobiotica* **42(4)**, 339-348 (2012).
3. Wang, P., Gao, C., Guo, N., *et al.* 2'-O-Galloylhyperin isolated from *Pyrola incarnata* Fisch. attenuates LPS-induced inflammatory response by activation of SIRT1/Nrf2 and inhibition of the NF-κB pathways *in vitro* and *vivo*. *Front. Pharmacol.* **9:679** (2018).

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, 11/23/2022

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