

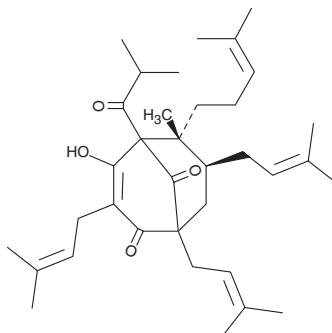
Product Information



Hyperforin

Catalog No. 75650

CAS Registry No.: 11079-53-1
Formal Name: 5-hydroxy-6R-methyl-1R,3,7S-tris(3-methyl-2-butenyl)-5S-(2-methyl-1-oxopropyl)-6R-(4-methyl-3-pentenyl)-bicyclo[3.3.1]non-3-ene-2,9-dione
MF: C₃₅H₅₂O₄
FW: 536.8
Purity: ≥90%
Stability: ≥1 year at -20°C
Supplied as: A solution in methanol



Laboratory Procedures

For long term storage, we suggest that hyperforin be stored as supplied at -20°C. It will be stable for at least one year.

Hyperforin is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of hyperforin in these solvents is approximately 20 mg/ml.

Hyperforin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, hyperforin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Hyperforin has a solubility of approximately 660 µg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

St. John's wort is a widely consumed herbal preparation which has been claimed to have a number of medicinal properties. It contains a number of known lipid signalling mediators, including chlorogenic acid, hypericin, hyperforin, and I3,II8-biapigenin.

Hyperforin exhibits two activities which may alter the action of other concurrent medications. It inhibits the activity of several CYP450 enzymes, with CYP2D6 being the most sensitive with an IC₅₀ of about 10 µg/ml.¹ Hyperforin is also a ligand for the steroid X receptor (SXR).² Since one activity of this receptor is the induction of CYP450 expression, the exact nature of hyperforin's drug-drug interactions must be evaluated on a case-by-case basis. However, these interactions certainly complicate its use as a human therapeutic.

References

1. Obach, R.S. Inhibition of human cytochrome P450 enzymes by constituents of St. John's wort, an herbal preparation used in the treatment of depression. *J. Pharmacol. Exp. Ther.* **294**(1), 88-95 (2000).
2. Wentworth, J.M., Agostini, M., Love, J., *et al.* St. John's wort, a herbal antidepressant, activates the steroid X receptor. *J. Endocrinol.* **166**, R11-R16 (2000).

Related Products

(±)5(6)-EpETrE - Cat. No. 50211 • (±)8(9)-EpETrE - Cat. No. 50351 • (±)11(12)-EpETrE - Cat. No. 50511 • (±)14(15)-EpETrE - Cat. No. 50651

WARNING: THIS PRODUCT IS NOT FOR HUMAN OR ANIMAL DISEASE DIAGNOSIS OR THERAPEUTIC DRUG USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 06/17/2008

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com