

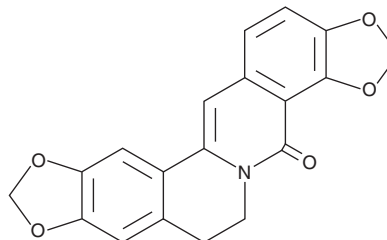
PRODUCT INFORMATION



8-Oxycoptisine

Item No. 34472

CAS Registry No.: 19716-61-1
Formal Name: 6,7-dihydro-4H-bis[1,3]benzodioxolo[5,6-a:4',5'-g]quinolizin-4-one
Synonym: 8-Oxocoptisine
MF: C₁₉H₁₃NO₅
FW: 335.3
Purity: ≥98%
UV/Vis.: λ_{max}: 224, 348 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Thalictrum glandulosissimum*



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

Laboratory Procedures

8-Oxycoptisine is supplied as a solid. A stock solution may be made by dissolving the 8-oxycoptisine in the solvent of choice, which should be purged with an inert gas. 8-Oxycoptisine is soluble in chloroform.

Description

8-Oxycoptisine is an isoquinoline alkaloid that has been found in *Coptis chinensis* and has anticancer and gastroprotective activities.¹⁻³ It is an active metabolite of coptisine (Item No. 28424) formed by gut microbiota.¹ 8-Oxycoptisine is cytotoxic against NCI-N87 gastric, but not Caco-2 colon, cancer cells (IC₅₀s = 20.31 and >100 μM, respectively).² It reverses resistance to paclitaxel (Item No. 10461) in non-multidrug-resistant SKOV3 cells, as well as in HCT-15 cells, which endogenously express high levels of P-glycoprotein (P-gp), with EC₅₀ values of 0.3 and 0.5 ng/ml, respectively.³ It reduces colonic shortening and inflammatory cell infiltration in a mouse model of ulcerative colitis induced by dextran sulfate (DSS; Item No. 23250) when administered at doses of 50 or 100 mg/kg.¹

References

1. Ai, G., Huang, Z., Cheng, J., *et al.* Gut microbiota-mediated transformation of coptisine into a novel metabolite 8-oxocoptisine: Insight into its superior anti-colitis effect. *Front. Pharmacol.* **12**, 12:639020 (2021).
2. Qian, P. and Yang, X.-W. Five new alkaloids from *Coptidis Rhizoma-Euodiae Fructus* couple and their cytotoxic activities against gastrointestinal cancer cells. *Fitoterapia* **93**, 74-80 (2014).
3. Min, Y.D., Yang, M.C.M., Lee, K.H., *et al.* Protoberberine alkaloids and their reversal activity of P-gp expressed multidrug resistance (MDR) from the rhizome of *Coptis japonica* Makino. *Arch. Pharm. Res.* **29**(9), 757-761 (2006).

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.

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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