

Product Data Sheet

Product Name: 8-Oxycoptisine

Cat. No.: GC49275

Chemical Properties

Cas. No. 19716-61-1

SMILES O=C1C2=C(C=C3C4=CC5=C(C=C4CCN13)OCO5)C=CC6=C2OCO6

Formula C₁₉H₁₃NO₅

M.Wt 335.3

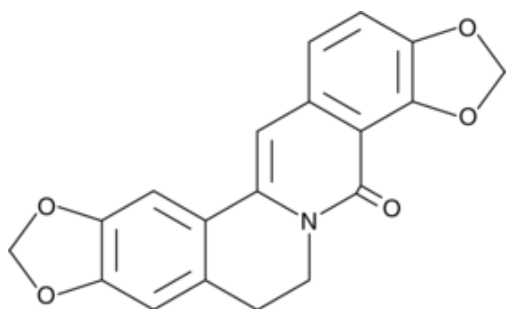
Solubility Chloroform: soluble

Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

8-Oxycoptisine is an isoquinoline alkaloid that has been found in *Coptis chinensis* and has anticancer and gastroprotective activities.^{1,2,3} It is an active metabolite of coptisine 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 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 when administered at doses of 50 or 100 mg/kg.¹

1. Ai, G., Huang, Z., Cheng, J., et al. Gut microbiota-mediated transformation of coptisine into a novel

Caution: Product has not been fully validated for medical applications. For research use only.

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metabolite 8-oxocoptisine: Insight into its superior anti-colitis effectFront.

Pharmacol.1212:639020(2021) 2.Qian, P., and Yang, X.-W.Five new alkaloids from Coptidis

Rhizoma-Euodiae Fructus couple and their cytotoxic activities against gastrointestinal cancer

cellsFitoterapia9374-80(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 MakinoArch. Pharm. Res.29(9)757-761(2006)

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