
Product Data Sheet

Product Name: Primin
 Cat. No.: GC60302

Chemical Properties

Cas. No. 15121-94-5

SMILES O=C1C(OC)=CC(C=C1CCCCC)=O

Formula $C_{12}H_{16}O_3$ M.Wt 208.25

Solubility Storage

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

Primin is a benzoquinone that has been found in *P. obconica* and has diverse biological activities.^{1,2,3,4} It selectively inhibits COX-2 over COX-1 (IC₅₀s = 0.09 and 5.14 μM, respectively) and induces the production of adrenochrome from epinephrine, a marker of pro-oxidant activity, in a cell-free assay when used at a concentration of 8.81 μM.¹ Primin is active against *T. brucei rhodesiense* and *L. donovani* (IC₅₀s = 0.144 and 0.711 μM, respectively), as well as *S. aureus* (IC₅₀ = 8.94 μM).^{2,3} *In vivo*, primin induces contact sensitization in guinea pigs.⁴

1.Landa, P., Kutil, Z., Temml, V., et al.Redox and non-redox mechanism of in vitro cyclooxygenase inhibition by natural quinones *Planta Med.* 78(4)326-333(2011)

2.Tasdemir, D., Brun, R., Yardley, V., et al.Antituberculous and antiprotozoal activities of primin, a natural benzoquinone: In vitro and in vivo studies *Chem. Biodivers.* 3(11)1230-1237(2006)

3.Viegas, F.P.D., Espuri, P.F., Oliver, J.C., et al.Leishmanicidal and antimicrobial activity of primin and primin-containing extracts from *Miconia willdenowii* *Fitoterapia* 138104297(2019)

4.Schulz, K.H., Garbe, I., Hausen, B.M., et al.The

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

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sensitizing capacity of naturally occurring quinones. Experimental studies in guinea pigs.
II. Benzoquinones Arch. Dermatol. Res. 264(3)275-286(1979)

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