

Product Data Sheet

Product Name: 8-Deoxylactucin

Cat. No.: GC81752

Chemical Properties

Cas. No. 65725-10-2

SMILES OCC([C@]1([H])[C@]2([H])[C@](CCC(C)=C13)([H])C(C(O2)=O)=C)=CC3=O

Formula $C_{15}H_{16}O_4$

M.Wt 260.29

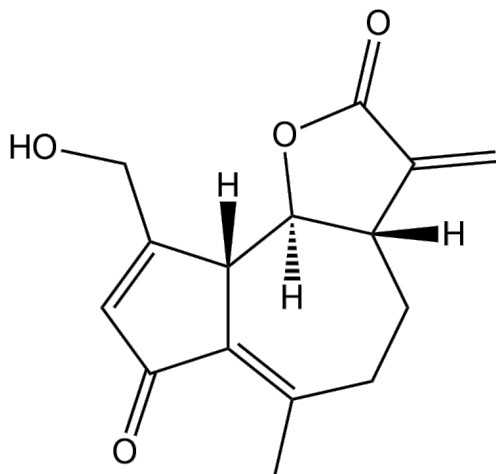
Solubility

Storage Store at -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-Deoxylactucin is an orally active sesquiterpene lactone. 8-Deoxylactucin inhibits LPS-induced NO

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

production in RAW264.7 macrophages with an IC_{50} value of $4.35\ \mu\text{M}$. 8-Deoxylactucin exerts anti-inflammatory effects by blocking the NF- κ B pathway. 8-Deoxylactucin demonstrates hepatoprotective efficacy in LPS/D-galactosamine-induced acute hepatitis model of mice. 8-Deoxylactucin can be used for the study of inflammatory diseases and inflammatory liver injuries [1].

In Vivo, 8-Deoxylactucin (2-10 mg/kg, i.g., once daily, 5 days) significantly reduces LPS/D-galactosamine (D-GalN)-induced increase in liver index (liver weight/body weight) in mice [1].

In Vitro, 8-Deoxylactucin (1 h pretreatment) significantly inhibits LPS-induced NO production in RAW264.7 macrophages, with an IC_{50} of $4.35\ \mu\text{M}$ [1]. 8-Deoxylactucin (1-10 μM , 1 h pretreatment) significantly reduces LPS-induced mRNA and protein expression of iNOS, as well as mRNA expression of pro-inflammatory cytokines including IL-1 β , IL-6, and TNF- α in RAW264.7 cells [1]. 8-Deoxylactucin (1-10 μM , 2 h pretreatment) significantly blocks LPS-induced phosphorylation of IKK α/β and I κ B α , inhibits I κ B α degradation, and reduces nuclear accumulation of NF- κ B p65 in RAW264.7 macrophages [1]. 8-Deoxylactucin (1-10 μM , 1 h pretreatment) significantly enhances protein expression and nuclear translocation of NRF2, up-regulates protein expression of NRF2-targeted antioxidant genes (HO, NQO1), and reduces ROS production in RAW264.7 cells [1].

References:

[1]. Zhou Y, et al. Sesquiterpene lactones from Cichorium intybus exhibit potent anti-inflammatory and hepatoprotective effects by repression of NF- κ B and enhancement of NRF2. J Ethnopharmacol. 2025 Mar 13;343:119439.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA