
Product Data Sheet

Product Name: Leachianone A

Cat. No.: GC36434

Chemical Properties

Cas. No. 97938-31-3

SMILES O=C1C[C@@H](C2=CC=C(O)C=C2OC)OC3=C(C[C@H](C(C)=C)C/C=C(C)\C)C(O)=CC(O)=C13

Formula	C ₂₆ H ₃₀ O ₆	M.Wt	438.51
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Solubility	Soluble in DMSO	Storage	Store at -20°C
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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**

Leachianone A, isolated from Radix Sophorae, has anti-malarial, anti-inflammatory, and cytotoxic potent[1]. Leachianone A induces apoptosis involved both extrinsic and intrinsic pathways[2].

Leachianone A (0-20 µg/ml; 24-72 hours) exhibits a marked inhibition on the survival of HepG2 cells time- and dose-dependently manner, IC50 values are 6.9 µg/ml, 3.4 µg/ml and 2.8 µg/ml in cells with 24-, 48- and 72-hours treatment, respectively[1]. Leachianone A (10-30 µg/ml; 48 hours) indicates that at low concentration of LA (10 µg/ml), a substantial amount of cells is primarily in the early phase of apoptosis, at higher concentrations, induces a shift of the cell population to late apoptotic/ necrotic stage[1]. Leachianone A (10-30 µg/ml; 48 hours) decreases the precursor of caspase-3 in a dose-dependent manner, reduces the protein level of the pro-forms of upstream initiator caspases, caspases-8 and -9, decreases two downstream substrates, namely inhibitor of caspase-activated DNase(ICAD) and poly-ADP-ribose polymerase (PARP) in HepG2 cells[1]. Cell Viability Assay[1] Cell Line: HepG2 cells

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

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Leachianone A (intravenously injection; 20 mg/kg, 30 mg/kg; once daily; 30 days) significantly diminishes the tumor volume by 17-54% in LA-treated nude mice, when compared with those solely given the vehicle[1]. Animal Model: Male nude mice with human hepatoma HepG2 cells[1]

[1]. Jeong GS, et al. Lavandulyl flavanones from *Sophora flavescens* protect mouse hippocampal cells against glutamate-induced neurotoxicity via the induction of heme oxygenase-1. *Biol Pharm Bull.* 2008 Oct;31(10):1964-7. [2]. Cheung CS, et al. Leachianone A as a potential anti-cancer drug by induction of apoptosis in human hepatoma HepG2 cells. *Cancer Lett.* 2007 Aug 18;253(2):224-35. Epub 2007 Mar 26.

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