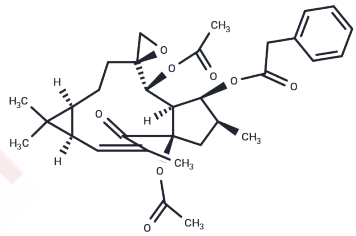
# Data Sheet (Cat.No.T2S0410)

TargetMol

## Euphorbia factor L1

### Chemical Properties



CAS No. : 76376-43-7

Formula: C32H40O8

Molecular Weight: 552.66

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

### Biological Description

| | |
|---|---|
| Description | Euphorbia factor L1 (Euphorbiasteroid) can reduce Bcl-2, PI3K, AKT, and mTOR protein and mRNA levels, and up-regulate caspase-9 and caspase-3 protein levels. It induces autophagy and has anti-cancer, anti-adipogenic, anti-osteoclastogenic, and multidrug-resistant regulatory effects. |
| Targets(IC50) | Apoptosis,P-gp |
| In vitro | Euphorbiasteroid suppresses adipogenic differentiation of 3T3-L1 cells, mainly at the early stage, and stimulates the AMPK signalling pathway. The anti-adipogenic effects of euphorbiasteroid could possibly be attributed to activation of the AMPK pathway, by decreasing the level of FAS and its up-regulators, including C/EBPs, PPAR-γ and SREBP-1c, without involving insulin signalling pathway[1]. Euphorbiasteroid could be a transport substrate for P-gp that can effectively inhibit P-gp-mediated drug transport and reverse resistance to anticancer drugs in MES-SA/Dx5 cells[2]. |
| Cell Research | 3T3-L1 cells were treated with euphorbiasteroid at concentrations of 6.25, 12.5, 25 and 50?μM for 2?days in adipogenesis induction medium, 2?days in adipogenesis medium and 2?days in culture medium (CM) sequentially during differentiation. Intracellular triglycerides (TGs) were stained with Oil red O (ORO) solution. |

### Solubility Information

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|---|---|
| Solubility | Methanol: Soluble,<br>DMSO: 37 mg/mL (66.95 mM),Sonication is recommended.<br>Ethanol: Soluble,<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.8094 mL | 9.0472 mL | 18.0943 mL |
| 5 mM | 0.3619 mL | 1.8094 mL | 3.6189 mL |
| 10 mM | 0.1809 mL | 0.9047 mL | 1.8094 mL |
| 50 mM | 0.0362 mL | 0.1809 mL | 0.3619 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Park SJ, et al. Euphorbiasteroid, a component of Euphorbia lathyris L., inhibits adipogenesis of 3T3-L1 cells via activation of AMP-activated protein kinase.Cell Biochem Funct. 2015, 33(4):220-5.
Jung Sook Choi, et al. Euphorbiasteroid reverses P-glycoprotein-mediated multi-drug resistance in human sarcoma cell line MES-SA/Dx5.Phytotherapy research. 2010, 24(7):1042-1046.