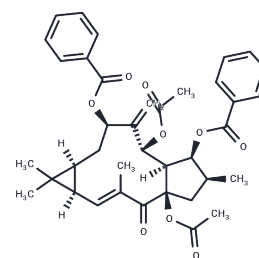


## Euphorbia Factor L2

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 218916-51-9   |
| Formula:          | C <sub>38</sub> H <sub>42</sub> O <sub>9</sub>  |
| Molecular Weight: | 642.73  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



## Biological Description

|               |  |
|---------------|--|
| Description   | Euphorbia Factor L2 alleviates lipopolysaccharide-induced acute lung injury and inflammation through inhibits NF-κB activation.  |
| Targets(IC50) | Apoptosis,NF-κB  |
| In vivo       | Euphorbia factor L2 (EFL2) on LPS-induced ALI in mice, where EFL2 attenuated pathological alterations in the lung and improved survival. Significant suppression of the recruitment and transmigration of inflammatory cells, specifically neutrophils, by 40?mg/kg of EFL2 was observed. EFL2 exerted potent anti-inflammatory effects by decreasing the levels of interleukin-1β (IL-1 β), interleukin-6 (IL-6), tumor necrosis factor-α (TNF- α), interleukin-8 (IL-8) and myeloperoxidase (MPO) in the lung and bronchioalveolar lavage fluid. Consistent with the findings in vivo, EFL2 also showed robust inhibitory effects on the production of IL-1 β, IL-6, TNF- α and IL-8 released from LPS-stimulated RAW264.7 cells in vitro. Interestingly, this effect appeared to be mediated by EFL2's inhibition of NF-κB signaling activation, but not the MAPK pathway. Not only phosphorylation of IKK α/β and IκBα was down-regulated, p65 translocation and its DNA-binding activity were also significantly suppressed by EFL2. Moreover, overexpression of p65 reversed the inhibitory effect of EFL2 in LPS-induced NF-κB activation and cytokines production. The observed anti-inflammatory bioactivity of EFL2 indicates its potential as a drug development candidate, particularly for LPS-mediated disorders of inflammation[1]. |

## Solubility Information

|                     |   |
|---------------------|---|
| Solubility          | DMSO: 12 mg/mL (18.67 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble)   |
| In vivo Formulation | 10% DMSO+90% Corn Oil: 1 mg/mL (1.56 mM),Sonication is recommended.<br><i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

### Preparing Stock Solutions

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|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.5559 mL | 7.7793 mL | 15.5586 mL |
| 5 mM  | 0.3112 mL | 1.5559 mL | 3.1117 mL  |
| 10 mM | 0.1556 mL | 0.7779 mL | 1.5559 mL  |
| 50 mM | 0.0311 mL | 0.1556 mL | 0.3112 mL  |

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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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Qiuping Z , Shuai Z , Xiaolan C , et al. Euphorbia factor L2 alleviates lipopolysaccharide-induced acute lung injury and inflammation in mice through the suppression of NF- $\kappa$ B activation[J]. Biochemical Pharmacology, 2018, 155: 444-454.

Lin M , Tang S , Zhang C , et al. Euphorbia factor L2 induces apoptosis in A549 cells through the mitochondrial pathway[J].2017.

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