

## (+)-Medicarpin

## Chemical Properties

CAS No. : 33983-39-0

Formula: C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>

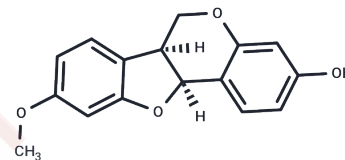
Molecular Weight: 270.28

Storage:

Keep away from moisture, Keep away from direct sunlight

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

Actual storage temperature shall be subject to the COA.



## Biological Description

|               |  |
|---------------|--|
| Description   | (+)-Medicarpin, a pterocarpin, is an isoflavonoid compound derived from medicinal plant species such as <i>Sophora japonica</i> , <i>Zollernia paraensis</i> , <i>Platymiscium yucatanum</i> , <i>Machaerium aristulatum</i> , and <i>Platymiscium floribundum</i> . It potently inhibits osteoclastogenesis and facilitates bone healing and increased bone mass through osteoblast differentiation, mediated by the estrogen receptor (ER) $\beta$ . |
| Targets(IC50) | Estrogen Receptor/ERR, Estrogen/progestogen Receptor   |

## Solubility Information

|            |   |
|------------|---|
| Solubility | DMSO: 45 mg/mL (166.49 mM), Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 3.6999 mL | 18.4993 mL | 36.9987 mL |
| 5 mM  | 0.740 mL  | 3.6999 mL  | 7.3997 mL  |
| 10 mM | 0.370 mL  | 1.8499 mL  | 3.6999 mL  |
| 50 mM | 0.074 mL  | 0.370 mL   | 0.740 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.

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

Yang X, et al. Total Synthesis of (+)-Medicarpin. J Nat Prod. 2017 Dec 22;80(12):3284-3288.

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