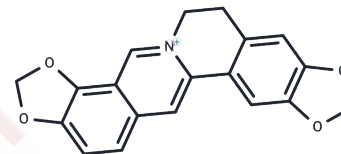


## Coptisine

### Chemical Properties

CAS No. : 3486-66-6  
 Formula: C<sub>19</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub>  
 Molecular Weight: 320.32  
 Storage: 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   | <p>1. Coptisine (Coptisin) treatment increases cell viability based on its reversal effect on the enhanced activity of Indoleamine 2, 3-dioxygenase . 2. Coptisine treats myocardial I/R likely through suppressing myocardial apoptosis and inflammation by inhibiting the Rho/ROCK pathway. 3. Coptisine is a potential anti-osteosarcoma drug candidate, via exerting a strong anti-osteosarcoma effect with very low toxicity . 4. Coptisine with a high dosage could inhibit cholesterol synthesis via suppressing the HMGCR expression and promoting the use and excretion of cholesterol via up-regulating LDLR and CYP7A1 expression. 5. Coptisine suppresses adhesion, migration and invasion of MDA-MB-231 breast cancer cells in vitro, the down-regulation of MMP-9 in combination with the increase of TIMP-1 possibly contributing to the anti-metastatic function for breast cancer.</p> |
| Targets(IC50) | IDO,Indoleamine 2,3-Dioxygenase (IDO),LDLR  |

### Solubility Information

|            |   |
|------------|---|
| Solubility | DMSO: 3.91 mg/mL (12.21 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

### Preparing Stock Solutions

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|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 3.1219 mL | 15.6094 mL | 31.2188 mL |
| 5 mM  | 0.6244 mL | 3.1219 mL  | 6.2438 mL  |
| 10 mM | 0.3122 mL | 1.5609 mL  | 3.1219 mL  |
| 50 mM | 0.0624 mL | 0.3122 mL  | 0.6244 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

He K, et al. The safety and anti-hypercholesterolemic effect of coptisine in Syrian golden hamsters. *Lipids*. 2015 Feb;50(2):185-94.

Rao PC, et al. Coptisine-induced cell cycle arrest at G2/M phase and reactive oxygen species-dependent mitochondria-mediated apoptosis in non-small-cell lung cancer A549 cells. *Tumour Biol*. 2017 Mar;39(3):12010428317694565.

Yu D, et al. The IDO inhibitor coptisine ameliorates cognitive impairment in a mouse model of Alzheimer's disease. *J Alzheimers Dis*. 2015;43(1):291-302.

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