

## Protopine

## Chemical Properties

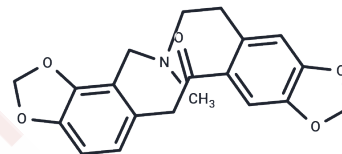
CAS No. : 130-86-9

Formula: C<sub>20</sub>H<sub>19</sub>NO<sub>5</sub>

Molecular Weight: 353.37

Appearance: no data available

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



## Biological Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description   | Protopine (Fumarine) is a benzylisoquinoline alkaloid. It has been found to inhibit histamine H1 receptors and platelet aggregation, and acts as an analgesic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Targets(IC50) | Reactive Oxygen Species,Platelet aggregation,Histamine Receptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Kinase Assay  | HT1080 cells are seeded in 24-well plates (2×10 <sup>4</sup> cells per well) and treated with Dorsomorphin in the presence or absence of glucose or 10 mM 2DG for 2 h. HT1080 cells that overexpressed the wild-type and dominant negative AMPKα1 are prepared by transfecting plasmid DNA (pAMPKα1-wt, pAMPKα1-D168A and pcFlag as a control) in 6-well plates, seeding in 24-well plate and treating with UPR inhibitors. Cells are lysed with cell lysis buffer (20 mM Tris-HCl, pH 7.5, 250 mM NaCl, 10% glycerol, 0.5% NP-40, 1 mM EDTA, 1 mM EGTA, 0.2 mM PMSF, 1 µg/mL pepstatin, 0.5 µg/mL leupeptin, 5 mM NaF, 2 mM Na <sub>3</sub> VO <sub>4</sub> , 2 mM β-glycerophosphate, 1 mM DTT). Relative AMPK kinase activity (mean±SD of duplicate determinations) to control sample (vehicle or pcFlag under normal growth conditions) is determined using the CycLex AMPK kinase assay kit[2]. |

## Solubility Information

|            |                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Solubility | DMSO: 3.53 mg/mL (10 mM),Sonication is recommended.<br>Chloroform 1:15: Soluble,<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg      |
|-------|-----------|------------|-----------|
| 1 mM  | 2.8299 mL | 14.1495 mL | 28.299 mL |
| 5 mM  | 0.566 mL  | 2.8299 mL  | 5.6598 mL |
| 10 mM | 0.283 mL  | 1.4149 mL  | 2.8299 mL |
| 50 mM | 0.0566 mL | 0.283 mL   | 0.566 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

Saeed SA, et al. Pharmacol Res. 1997 Jul;36(1):1-7.

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