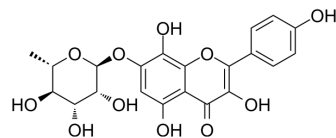


Rhodionin

| | |
|--------------------|--|
| Cat. No.: | HY-N0241 |
| CAS No.: | 85571-15-9 |
| Molecular Formula: | C ₂₁ H ₂₀ O ₁₁ |
| Molecular Weight: | 448.38 |
| Target: | Cholinesterase (ChE) |
| Pathway: | Neuronal Signaling |
| Storage: | 4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light) |



SOLVENT & SOLUBILITY

| | | | | | |
|---|--|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 16.67 mg/mL (37.18 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 2.2303 mL | 11.1513 mL | 22.3025 mL |
| | | 5 mM | 0.4461 mL | 2.2303 mL | 4.4605 mL |
| | | 10 mM | 0.2230 mL | 1.1151 mL | 2.2303 mL |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.67 mg/mL (3.72 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|---------------------------|---|
| Description | Rhodionin, isolated from the root of <i>Rhodiola crenulata</i> , is a specific non-competitive cytochrome P450 2D6 inhibitor with an IC ₅₀ of 0.761 μM and a Ki of 0.769 μM ^[1] . Rhodionin exhibits potent, dose-dependent inhibitory effects on acetylcholinesterase (AChE) with IC ₅₀ ranged from 57.50 to 2.43 μg/mL ^[2] . Rhodionin exhibits potent DPPH free radical scavenging activities, with an IC ₅₀ of 19.49 μM ^[3] . |
| IC ₅₀ & Target | AChE |

REFERENCES

- [1]. Xu W, et al. Two potent cytochrome P450 2D6 inhibitors found in *Rhodiola rosea*. *Pharmazie*. 2013 Dec;68(12):974-6.
- [2]. Li FJ, et al. Molecular interaction studies of acetylcholinesterase with potential acetylcholinesterase inhibitors from the root of *Rhodiola crenulata* using molecular docking and isothermal titration calorimetry methods. *Int J Biol Macromol*. 2017 Nov;104(Pt A):527-532.

[3]. Choe KI, et al. The antioxidant and anti-inflammatory effects of phenolic compounds isolated from the root of *Rhodiola sachalinensis* A. BOR. *Molecules*. 2012 Sep 27;17(10):11484-94.

Caution: Product has not been fully validated for medical applications. For research use only.

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