MCE RedChemExpress

(R)-Reticuline

Cat. No.:HY-N1356ACAS No.:3968-19-2Molecular Formula: $C_{19}H_{23}NO_4$ Molecular Weight:329.39Target:OthersPathway:Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.59 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.59 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(R)-Reticuline is an isomer of Reticuline (HY-N1356). Reticuline displays anti-inflammatory and cardiovascular effects through JAK2/STAT3 and NF-kB signaling pathways. Salutaridine is a key intermediate in morphine biosynthesis. Salutaridine can be converted from (R)-Reticuline in the poppy plant. The conversion system relies on membrane-bound cytochrome P-450 enzymes and also requires reducing cofactors NADPH, molecular oxygen, etc^{[1][2]}.

REFERENCES

[1]. Gerardy R, et al. Formation of salutaridine from (R)-reticuline by a membrane-bound cytochrome P-450 enzyme from Papaver somniferum[J]. Phytochemistry, 1992, 32(1): 79-86.

[2]. Yang X, et al. Anti-Inflammatory Effects of Boldine and Reticuline Isolated from Litsea cubeba through JAK2/STAT3 and NF-κB Signaling Pathways. Planta Med. 2018 Jan;84(1):20-25.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA