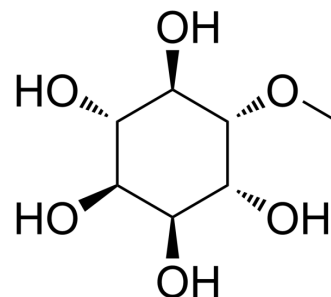


L-Quebrachitol

Cat. No.:	HY-N2375		
CAS No.:	642-38-6		
Molecular Formula:	C ₇ H ₁₄ O ₆		
Molecular Weight:	194.18		
Target:	Wnt; β -catenin		
Pathway:	Stem Cell/Wnt		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (643.73 mM; Need ultrasonic)
 H₂O : 100 mg/mL (514.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.1499 mL	25.7493 mL	51.4986 mL
	5 mM	1.0300 mL	5.1499 mL	10.2997 mL
	10 mM	0.5150 mL	2.5749 mL	5.1499 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: \geq 2.08 mg/mL (10.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline)
 Solubility: \geq 2.08 mg/mL (10.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: \geq 2.08 mg/mL (10.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

L-Quebrachitol is a natural product isolated from many plants, promotes osteoblastogenesis by upregulation of BMP-2, runt-related transcription factor-2 (Runx2), MAPK (ERK, JNK, p38 α), and Wnt/ β -catenin signaling pathway^[1].

REFERENCES

[1]. Yodthong T, et al. l-Quebrachitol Promotes the Proliferation, Differentiation, and Mineralization of MC3T3-E1 Cells: Involvement of the BMP-2/Runx2/MAPK/Wnt/ β -Catenin Signaling Pathway. *Molecules*. 2018 Nov 26;23(12).

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