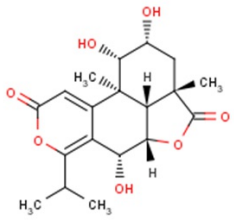
Data Sheet (Cat.No.T16264)

TargetMol
A DRUG SCREENING EXPERT

Nagilactone B

Chemical Properties



CAS No.:	19891-51-1
Formula:	C19H24O7
Molecular Weight:	364.39
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Nagilactone B is extracted from the root bark of Podocarpus nagi and it also is a liver X receptor (LXR) agonist.
Targets(IC_{50})	LXR: None
In vivo	Nagilactone B (NLB) inhibits atherosclerosis in apoE-/- mice by inducing ATP-binding cassette transporter A1 (ABCA1) and G1 (ABCG1) mediated cholesterol efflux in macrophages. Nagilactone B treatment (10 and 30 mg/kg/day) obviously decreases en face aortic lesions, compared with the HFD group by 54.96±10.06% (P<0.01), 71.50±15.37% (P<0.001) in both NLB (L) and NLB (H) groups. In particular, Nagilactone B markedly attenuates atherosclerotic plaque lesion areas in the aortic arch aorta, thoracic aorta, and abdominal aorta [P<0.01 in NLB (H) group]. Male apoE-deficient mice on C57BL/6J background receive Nagilactone B (10 and 30 mg/kg) for 12 weeks. Compared with the model group, Nagilactone B treatment (10 and 30 mg/kg) significantly decreases en face lesions of total aorta areas. Six-week-old male apoE-/- mice on an HFD are randomized to receive Atorvastatin (10 mg/kg/day), Nagilactone B (10 and 30 mg/kg/day), or CMC-Na for 12 weeks. Mice on a chow diet are administered CMC-Na as the normal diet control group .

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.744 mL	13.722 mL	27.443 mL
5 mM	0.549 mL	2.744 mL	5.489 mL
10 mM	0.274 mL	1.372 mL	2.744 mL
50 mM	0.055 mL	0.274 mL	0.549 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Gui Y, et al. A novel small molecule liver X receptor transcriptional regulator, nagilactone B, suppresses atherosclerosis in apoE-deficient mice. Cardiovasc Res. 2016 Oct;112(1):502-14.

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