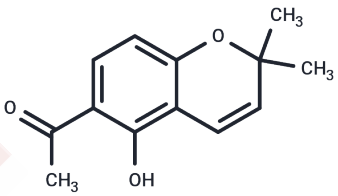
Data Sheet (Cat.No.TN6793)

TargetMol

Demethylisoencecalin

Chemical Properties



CAS No. : 24672-84-2

Formula: C13H14O3

Molecular Weight: 218.25

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Demethylisoencecalin (6-Acetyl-5-hydroxy-2,2-dimethyl-2H-1-benzopyran) has anti-hyperglycemic activity.
Targets(IC50)	Others,Glucosidase,glycosidase
In vitro	Demethylisoencecalin (1) and caleins A (4) and C (5) (3.16–31.6 mg/kg, p.o.), the major components from an infusion of Calea ternifolia controlled postprandial glucose levels during an oral sucrose tolerance test (OSTT, 3 g/kg) in normal and nicotinamide/streptozotocin (NA/STZ, 40/100 mg/kg) hyperglicemic mice. The effects were comparable to those of acarbose (5 mg/kg). During the isolation of 1, 4, and 5, four additional metabolites not previously reported for the plant, were obtained, namely 6-acetyl-5-hydroxy-2-methyl-2-hydroxymethyl-2H-chromene (3), herniarin (6), scoparone (7), and 4′,7-dimethylapigenin (8). In addition, the structure of calein C (5) was confirmed by X-ray analysis. Pharmacological evaluation of the essential oil of the species (31.6–316.2 mg/kg, p.o.) provoked also an important decrement of blood glucose levels during an OSTT[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (274.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.5819 mL	22.9095 mL	45.819 mL
5 mM	0.9164 mL	4.5819 mL	9.1638 mL
10 mM	0.4582 mL	2.291 mL	4.5819 mL
50 mM	0.0916 mL	0.4582 mL	0.9164 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

EscandónRivera, Sonia, PérezVásquez,等. Molecules, Vol. 22, Pages 289: Anti-Hyperglycemic Activity of Major Compounds from Calea ternifolia. 2017.