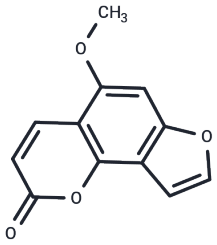
Data Sheet (Cat.No.T5747)

TargetMol

ISOBERGAPTEN

Chemical Properties



CAS No. : 482-48-4

Formula: C12H8O4

Molecular Weight: 216.19

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	ISOBERGAPTEN is a plant growth regulating substance, it is the principal constituents responsible for the antimycobacterial activity of the roots of Heracleum maximum; it may form an important class of natural defensive agents against fungi.
Targets(IC50)	Others
In vitro	Isobergapten,(3R,8S)-Falcarindiol, bergapten, angelicin, sphondin, pimpinellin, isopimpinellin and 6-isopentenyloxyisobergapten were identified as the principal constituents responsible for the antimycobacterial activity of the roots of Heracleum maximum.??treatment for infectious diseases, specifically tuberculosis.
Cell Research	A methanolic extract of Heracleum maximum roots was subjected to bioassay guided fractionation using the microplate resazurin assay (MRA) to assess inhibitory activity against Mycobacterium tuberculosis strain H37Ra. The antimycobacterial constituents were identified by NMR, MS and polarimetry.

Solubility Information

Solubility	DMSO: < 2.16 mg/mL (10 mM, insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.6256 mL	23.1278 mL	46.2556 mL
5 mM	0.9251 mL	4.6256 mL	9.2511 mL
10 mM	0.4626 mL	2.3128 mL	4.6256 mL
50 mM	0.0925 mL	0.4626 mL	0.9251 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

Neill T O , Johnson J A , Webster D , et al. The Canadian medicinal plant Heracleum maximum contains antimycobacterial diynes and furanocoumarins[J]. Journal of ethnopharmacology, 2013, 147(1):232-237.
Li S, Kelly C, Knob R, et al.Analysis of Coumarin-Based Phototoxins in Citrus-Derived Essential Oils Using Liquid Chromatography-Mass Spectrometry.Chromatographia.2023: 1-11.