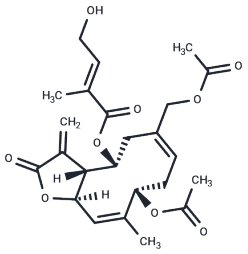
Data Sheet (Cat.No.T5826)

TargetMol

Eupalinolide A

Chemical Properties



CAS No. : 877822-40-7

Formula: C24H30O9

Molecular Weight: 462.49

Storage: Keep away from direct sunlight,Store at low temperature
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	Eupalinolide B is a natural product ,and demonstrates potent cytotoxicity against A-549, BGC-823, SMMC-7721, and HL-60 tumour cell lines.
Targets(IC50)	HSP
In vitro	Eupalinolide B and A (EB and EA) from E. lindleyanum, and describe their actions as HSP-inducers.?EA and EB both induced the expression of HSP70 in cells at concentrations that did not significantly affect cell viability.?Treatment of cells with EA or EB activated heat shock factor 1 (HSF1), while the artificial suppression of HSF1 expression diminished the EA- or EB-mediated induction of HSP70 expression.? Furthermore, EB inhibited the interaction between HSF1 and HSP90, which is known to inhibit the activity of HSF1.?Suggest that EA and EB induce the expression of HSP70 via the activation of HSF1 by inhibiting the interaction between HSF1 and HSP90.?EA and EB both induced the expression of HSP70 synergistically with other stressors.?Furthermore, pre-treatment of cells with EA or EB suppressed melanin production and stressor-induced apoptosis.?These effects were suppressed by the artificial suppression of HSP70 expression.?In vivo, the percutaneous administration of EB induced the expression of HSP70 and suppressed UVB radiation-induced damage, inflammatory responses and melanin production in the skin.[1]

Solubility Information

Solubility	DMSO: 240 mg/mL (518.93 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.32 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1622 mL	10.811 mL	21.6221 mL
5 mM	0.4324 mL	2.1622 mL	4.3244 mL
10 mM	0.2162 mL	1.0811 mL	2.1622 mL
50 mM	0.0432 mL	0.2162 mL	0.4324 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

Yamashita Y , Ikeda T , Matsuda M , et al. Purification and characterization of HSP-inducers from Eupatorium lindleyanum[J]. Biochemical Pharmacology, 2012, 83(7):909-922.
Zhang J , Zhao F , Yu X , et al. Pharmacokinetics of eupalinolide A, eupalinolide B and hyperoside from Eupatorium lindleyanum in rats by LC/MS/MS[J]. Journal of Chromatography B, 2015, 995-996:1-7.