

FD-838

Chemical Properties

CAS No.:	110341-78-1
Formula:	C ₂₂ H ₂₁ NO ₇
Molecular Weight:	411.41
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	FD-838 shows good antileishmanial and moderate anticancer activities, it can moderately inhibit the growth of cultured P388 and HL-60 cell lines. FD-838 has anti-fungal activity, it can significantly inhibit the growth of two plant fungal pathogens <i>Botrytis cinerea</i> and <i>Glomerella cingulata</i> with a minimum inhibitory concentration of 6.25 µM for each, similar to that of the positive fungicide, carbendazim.
Targets(IC ₅₀)	Antifection: None
In vitro	METHODS AND RESULTS: Seven known compounds, three diketopiperazine alkaloids, 12β-hydroxyverruculogen TR-2 (1), fumitremorgin C (2) and methylthiogliotoxin (5), two hetero-spirocyclic γ-lactam alkaloids, pseurotin A (3) and FD-838 (4), and cerevisterol (6) and herierin IV (7), were isolated from the mycelia of the basidiomycete <i>Hericium erinaceum</i> and identified by spectroscopic analyses. The antioxidant and antifungal activities of compounds 1-6 were evaluated. CONCLUSIONS: The results indicated that compounds 1, 3 and 6 exhibited potential antioxidant activity against DPPH (2, 2-diphenyl-1-picrylhydrazyl) radical with their IC ₅₀ data of ca. 12 µM, compared with positive control tertiary butylhydroquinone. In addition, compound 4 significantly inhibited the growth of two plant fungal pathogens <i>Botrytis cinerea</i> and <i>Glomerella cingulata</i> with a minimum inhibitory concentration of 6.25 µM for each, similar to that of the positive fungicide, carbendazim. Compounds 1-5 were isolated from the genus <i>Hericium</i> for the first time.

Solubility Information

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

	1mg	5mg	10mg
1 mM	2.431 mL	12.153 mL	24.307 mL
5 mM	0.486 mL	2.431 mL	4.861 mL
10 mM	0.243 mL	1.215 mL	2.431 mL
50 mM	0.049 mL	0.243 mL	0.486 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Bioactive metabolites from the mycelia of the basidiomycete *Hericium erinaceum*. *Nat Prod Res.* 2014;28(16):1288-92.
2. Antiparasitic and anticancer constituents of the endophytic fungus *Aspergillus* sp. strain F1544. *Nat Prod Commun.* 2012 Feb;7(2):165-8.

Inhibitors · Natural Compounds · Compound Libraries

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