

Pseurotin A

Chemical Properties

CAS No.:	58523-30-1
Formula:	C ₂₂ H ₂₅ NO ₈
Molecular Weight:	431.44
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Pseurotin A has immunosuppressive activity, it inhibits immunoglobulin E(IgE) production in vitro. It shows a moderate effect against the phytopathogenic bacteria <i>Erwinia carotovora</i> and <i>Pseudomonas syringae</i> , with IC ₅₀ values of 220 and 112 microg ml ⁻¹ , respectively. Pseurotin A shows to be active against the proliferation of four different glioma cells with IC ₅₀ values of 0.51-29.3 uM, the targeting multiple metabolic enzymes might be one of the antglioma mechanisms of pseurotin A.
Targets(IC ₅₀)	Antifection: None Immunology & Inflammation related: None
In vitro	<p>Penicillium janczewskii K. M. Zalessky was isolated as an endophytic fungus from the phloem of the Chilean gymnosperm <i>Prumnopitys andina</i>. METHODS AND RESULTS: When grown in liquid yeast extract-malt extract-glucose broth, the fungus produced two main secondary metabolites. The compounds were for the first time isolated from this species and identified by spectroscopic methods as Pseurotin A and cycloaspeptide A. This is the first report on the production of cyclic peptides by endophytic fungi from Chilean gymnosperms.</p> <p>CONCLUSIONS: Pseurotin A and cycloaspeptide A presented low cytotoxicity towards human lung fibroblasts with IC₅₀ > or = 1000 microM. Pseurotin A showed a moderate effect against the phytopathogenic bacteria <i>Erwinia carotovora</i> and <i>Pseudomonas syringae</i>, with IC₅₀ values of 220 and 112 microg ml⁻¹, respectively.</p>

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	2.318 mL	11.589 mL	23.178 mL
5 mM	0.464 mL	2.318 mL	4.636 mL
10 mM	0.232 mL	1.159 mL	2.318 mL
50 mM	0.046 mL	0.232 mL	0.464 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. Cycloaspeptide A and pseurotin A from the endophytic fungus *Penicillium janczewskii*. *Z Naturforsch C*. 2008 May-Jun;63(5-6):383-8.
2. Pseurotin A and its analogues as inhibitors of immunoglobulin E [correction of immunoglobuline E] production. *Bioorg Med Chem Lett*. 2009 Mar 1;19(5):1457-60.

Inhibitors · Natural Compounds · Compound Libraries

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