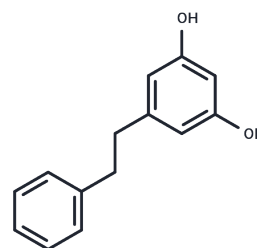


Dihydropinosylvlin

Chemical Properties

CAS No. : 14531-52-3
Formula: C₁₄H₁₄O₂
Molecular Weight: 214.26
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	Dihydropinosylvlin is a phytoalexin, it shows antifungal activity against <i>Cladosporium cladosporioides</i> , <i>Botryodiplodia theobromae</i> , <i>Aspergillus niger</i> and <i>Penicillium schlerotgenum</i> , it also exhibits strong antibacterial activity against <i>Bacillus cereus</i> , <i>Staphylococcus aureus</i> , <i>Pseudomonas aeruginosa</i> and <i>Escherichia coli</i> . Dihydropinosylvlin and batatasin IV can inhibit the germination of seeds and root elongation in young seedlings of <i>Sorghum bicolor</i> .
Targets(IC50)	Anti-infection
In vitro	Dihydropinosylvlin, batatasin IV, demethylbatatasin IV and batatasin III were found in the water yam (<i>Dioscorea alata</i>) which had been inoculated with <i>Botryodiplodia theobromae</i> or treated with mercuric chloride. Following induction, transient increases were observed in the first three compounds and this was preceded by a transient increase in the activity of phenylalanine ammonia lyase but not tyrosine ammonia lyase activity. CONCLUSIONS: In mercuric chloride treated tubers an increase in polyphenol oxidase was also observed. The dormancy inducing compounds Dihydropinosylvlin and batatasin IV were also found to inhibit the germination of seeds and root elongation in young seedlings of <i>Sorghum bicolor</i> . By comparison, demethylbatatasin IV was not inhibitory.

Solubility Information

Solubility	DMSO: < 2.14 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	4.6672 mL	23.3361 mL	46.6723 mL
5 mM	0.9334 mL	4.6672 mL	9.3345 mL
10 mM	0.4667 mL	2.3336 mL	4.6672 mL
50 mM	0.0933 mL	0.4667 mL	0.9334 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

Induction of pal activity and dihydrostilbene phytoalexins in *Dioscorea alata* and their plant growth inhibitory properties *Phytochemistry*, 1989, 28(10):2621-5.

Dihydrostilbene phytoalexins from *Dioscorea rotundata*. *Phytochemistry*, 1987, 26(12): 3187-9.

Dihydrophenanthrenes and other antifungal stilbenoids from *Stemona cf. pierrei*. *Phytochemistry*. 2004 Jan;65(1): 99-106.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481