

Data Sheet (Cat.No.TN4816)



Polypodine B

Chemical Properties

CAS No.: 18069-14-2
Formula: C27H44O8
Molecular Weight: 496.63
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Polypodine B shows growth-promoting effects on in vitro development of the larval endoparasitoid, Venturia canescens (Hymenoptera: Ichneumonidae).		
Targets(IC ₅₀)	Others: None		
In vitro	We previously reported that lipophorin, fetal bovine serum (FBS), and 20-hydroxyecdysone (20-HE) are essential for the development of the larval endoparasitoid Venturia canescens larvae in vitro. The present study was undertaken to determine the optimal concentrations of those three substances in the MGM-450 medium, and to examine the hormonal effects of ecdysteroids and juvenile hormone (JH) on the development of the parasitoid larvae in vitro. METHODS AND RESULTS: When the culture was started with embryos at the postgermband stage, concentrations of 3 mg/ml of lipophorin and 20% of FBS were most suitable for the development of the parasitoid. The growth-promoting effect of 20-HE increased in a concentration-dependent manner and peaked at a concentration of 1 &mgrg/ml. Excess concentration led to malformations of the larvae. Three other ecdysteroids, ecdysone, 2-deoxy-20-hydroxyecdysone, and Polypodine B had the same effect, although their activity was lower than that of 20-HE. Cholesterol had no effect; most larvae failed to develop. When the medium was supplemented with JH, the duration of the developmental period was significantly shortened, but this hormone was not found to be essential.		

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	2.014 mL	10.068 mL	20.136 mL
5 mM	0.403 mL	2.014 mL	4.027 mL
10 mM	0.201 mL	1.007 mL	2.014 mL
50 mM	0.040 mL	0.201 mL	0.403 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.

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Reference

1. Growth-promoting effects of ecdysteroids and juvenile hormone on in vitro development of the larval endoparasitoid, Venturia canescens (Hymenoptera: Ichneumonidae). J Insect Physiol. 2000 Apr;46(4):467-476.

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