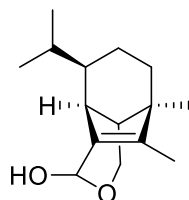


Prehelminthosporol

Code No.: **BIA-P2835**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 1619-13-2
Molecular Formula	: C ₁₅ H ₂₄ O ₂
Molecular Weight	: 236.4
Source	: <i>Bipolaris</i> sp.
Appearance	: Light tan oil
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Prehelminthosporol is the immediate precursor of helminthosporol, first isolated in 1965 from *Helminthosporium sativum*. Prehelminthosporol inhibits coleoptile growth at 1mM and 0.1mM, while significantly promoting growth at 0.01mM. Prehelminthosporol inhibits H⁺-ATPase in a dose-dependent manner, with complete inhibition at 500 μM, and inhibits ATP hydrolysis. Helminthosporol reduces Ca²⁺ uptake with maximal inhibition of 60% at 500 μM toxin. Prehelminthosporol stimulates 1,3-β-glucan synthase activity at concentrations below 100 μM, with higher concentrations being inhibitory.

References

1. Terpenoids: VIII. The immediate precursors of helminthosporol and helminthosporol. De May P. et al. Can J Chem. 1965, 43, 1357.
2. Prehelminthosporol and prehelminthosporol acetate: Plant growth regulating properties. Cutler H.G. et al. J Agric Food Chem. 1982, 30, 658.
3. Effect of the fungal pathogen *Bipolaris sorokiniana* toxin prehelminthosporol on barley root plasma membrane vesicles. Olbe, M. et al. Plant Pathol. 1995, 44, 625.