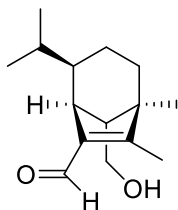


Helminthosporol

Code No.: **BIA-H2839**

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



Synonyms :

Specifications

CAS #	:	1619-29-0
Molecular Formula	:	C₁₅H₂₄O₂
Molecular Weight	:	236.4
Source	:	<i>Bipolaris</i> sp.
Appearance	:	Yellow solid
Purity	:	>95% by HPLC
Long Term Storage	:	-20°C
Solubility	:	Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Helminthosporol is a rare sesquiterpene isolated from *Helminthosporium*, *Bipolaris* and other fungal species. Helminthosporol demonstrates phytotoxic effects in some plant models, affecting membrane permeability, inhibiting mitochondrial oxidative phosphorylation, photophosphorylation in chloroplasts, proton pumping across the cell plasma membrane, and 1,3-β-glucan synthase activity. Helminthosporol also demonstrates modest gibberellin-like activity, inducing seed germination. Helminthosporol reversibly inhibits ACAT in rat liver microsomes at a concentration of 0.5 mM.

References

1. Isolation of helminthosporol as a natural plant growth regulator and its chemical structure. Tamura S. et al. *Agric Biol Chem.* 1963, 27, 738.
2. Bioactive sesquiterpenes from an endophytic fungus *Bipolaris sorokiniana* isolated from a popular medicinal plant *Costus speciosus*. Qader M.M. et al. *Mycology* 2017, 8, 17.
3. Plant cell membranes as biochemical targets of the phytotoxin helminthosporol. Briquet M. et al. *J Bioenergetics Biomembranes* 1998, 30, 285.
4. Gibberellin-like activity of helminthosporol and helminthosporic acid. Briggs D.E. *Nature* 1966, 210, 418.
5. Helminthosporic acid functions as an agonist for gibberellin receptor. Miyazaki S. et al. *Biosci Biotechnol Biochem.* 2017, 81, 2152.
6. Inhibition of acyl:Co-A cholesterol transferase by helminthosporol and its related compounds. Park J.K. et al. *J Antibiot.* 1993, 46, 1303.