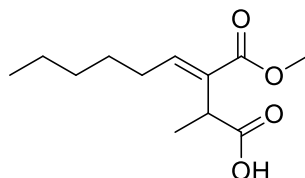


Methyl piliformate

Code No.: **BIA-M2270**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : 1-Methyl 2-(1E)-1-hexen-1-yl-3-methylbutanedioate

Specifications

CAS #	: 898221-37-9
Molecular Formula	: C₁₂H₂₀O₄
Molecular Weight	: 228.3
Source	: Unidentified fungus
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Methyl piliformate is the methyl ester of piliformic acid produced by *Xylaria* sp.. Methyl piliformate has modest antimalarial activity. Little else is published on the bioprofile of the methyl ester, however its parent is reported to have mild inhibitory activity against *Propionibacterium acnes*, inhibiting the *P. acnes*-induced pro-inflammatory cytokines production in THP-1 cells. Piliformic acid is active against the plant fungal pathogen *Colletotrichum gloeosporioides* with MIC 2.92 µmol/mL and has antileishmanial activity.

References

1. Metabolites of the higher fungi. Part 22. 2-Butyl-3-methylsuccinic acid and 2-hexylidene-3-methylsuccinic acid from xylariaceous fungi. Anderson J.R. et al. *J Chem Soc Perkin Trans.* 1 1985, 1481.
2. Antimalarial halorosellinic acid from the marine fungus *Halorosellinia oceanica*. Chinworrungsee M. et al. *Bioorg Med Chem Lett.* 2001, 11, 1965.
3. Leishmanicidal compounds of *Nectria pseudotrichia*, an endophytic fungus isolated from the plant *Caesalpinia echinata* (Brazilwood). Barros Cota B. et al. *Mem Inst Oswaldo Cruz.* 2018, 113, 102.
4. In vitro antibacterial and anti-inflammatory effects of novel insect fungus *Polycephalomyces phaothaiensis* extract and its constituents against *Propionibacterium acnes*. Witsanu Sonyot et al. *Antibiotics* 2020, 9, 274.
5. The potential of compounds isolated from *Xylaria* spp. as antifungal agents against anthracnose. Elias L.M. et al. *Braz J Microbiol.* 2018, 49, 840.