Data Sheet (Cat.No.T16033)



ME1111

Chemical Properties

CAS No.: 1391758-52-3 Formula: C12H14N2O

Molecular Weight: 202.25
Appearance: N/A

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



Biological Description

Description	ME1111 is an inhibitor of the succinate dehydrogenase of Trichophyton species and it also is an antifungal agent that is active against dermatophytes. ME1111 has an excellent ability to penetrate human nails and is used for onychomycosis research.	
Targets(IC ₅₀)	dermatophytes: None	
In vitro	ME1111 mainly affects the permeability of the cell membrane[1]. ME1111 inhibits T. mentagrophytes TIMM 2789 (MICs: $0.5 \mu g/mL$ and $0.25 \mu g/mL$ in RPMI 1640 medium and SDB, respectively). ME1111 strongly inhibits the succinate-2,6-dichlorophenolindophenol reductase reaction in Trichophyton rubrum and T. mentagrophytes (IC50: $0.029 \mu g/mL$, $0.025 \mu g/mL$) but only shows moderate inhibition of the same reaction in human cell lines[2].	

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	4.944 mL	24.722 mL	49.444 mL
5 mM	0.989 mL	4.944 mL	9.889 mL
10 mM	0.494 mL	2.472 mL	4.944 mL
50 mM	0.099 mL	0.494 mL	0.989 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.

Reference

- 1. Nishiyama Y, et al. Morphological Effect of the New Antifungal Agent ME1111 on Hyphal Growth of Trichophyton mentagrophytes, Determined by Scanning and Transmission Electron Microscopy. Antimicrob Agents Chemother. 2016 Dec 27;61(1).
- 2. Takahata S, et al. Mechanism of Action of ME1111, a Novel Antifungal Agent for Topical Treatment of Onychomycosis. Antimicrob Agents Chemother. 2015 Nov 23;60(2):873-80.

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