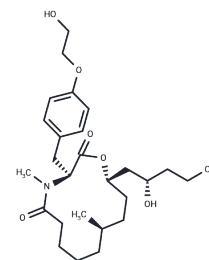


PF-1163A

Chemical Properties

CAS No. : 258871-59-9
 Formula: C₂₇H₄₃N₀O₆
 Molecular Weight: 477.6
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	PF-1163A, a depsipeptide antifungal compound isolated from Penicillium, blocks ergosterol synthesis with an IC ₅₀ of 12 ng/ml. This compound specifically inhibits the enzyme ERG25p, a C-4 methyl oxidase in the ergosterol biosynthetic pathway, leading to its antifungal activity. Notably, in Saccharomyces cerevisiae modified to express ERG biosynthesis genes, PF-1163A exhibits an inhibition concentration (MIC value) of 12.5 µg/ml against ERG25p, though strains overexpressing ERG25p show resistance. Additionally, PF-1163A effectively suppresses the growth of Candida albicans (MIC = 8 µg/ml), without affecting other Candida species, Aspergillus fumigatus, or HepG2 cells. Remarkably, it enhances the efficacy of fluconazole against azole-resistant C. albicans strains, showing a significant decrease in MICs (1 and 0.0078 µg/ml alone and in combination, respectively). PF-1163A distinguishes itself from PF-1163B by its more polar nature.
Targets(IC50)	Others,Antifungal

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0938 mL	10.469 mL	20.938 mL
5 mM	0.4188 mL	2.0938 mL	4.1876 mL
10 mM	0.2094 mL	1.0469 mL	2.0938 mL
50 mM	0.0419 mL	0.2094 mL	0.4188 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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