

TAM-16

Chemical Properties

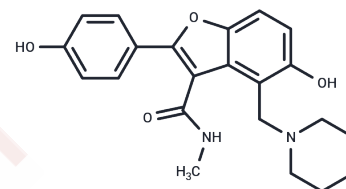
CAS No. : 2030241-59-7

Formula: C₂₂H₂₄N₂O₄

Molecular Weight: 380.44

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	TAM-16 is a potent, orally active inhibitor of polyketide synthase 13 (Pks13) with an IC ₅₀ value of 0.32 μ M, demonstrating promising activity against Mycobacterium tuberculosis. Additionally, TAM-16 inhibits the hERG cardiac ion channel [1] [2].
Targets(IC ₅₀)	Antibacterial
In vitro	TAM-16 (compound 1) inhibits the M. tuberculosis strain H37Rv with an IC ₅₀ value of 0.08 μ M [1]. Additionally, TAM-16 (0-10 μ M) targets Pks13 to suppress Mycobacterium tuberculosis [1].
In vivo	In a study involving a BALB/c mouse model of tuberculosis (TB), oral administration of TAM-16 (compound 1) at a dose of 200 mg/kg daily over a period of 14 days significantly reduced the lung CFU (colony-forming units) count by approximately 0.9 log ₁₀ [2]. This reduction was observed when compared to untreated control mice, indicating that TAM-16 effectively prevents typical pulmonary lesions in a mouse model of TB infection.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6285 mL	13.1427 mL	26.2854 mL
5 mM	0.5257 mL	2.6285 mL	5.2571 mL
10 mM	0.2629 mL	1.3143 mL	2.6285 mL
50 mM	0.0526 mL	0.2629 mL	0.5257 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

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