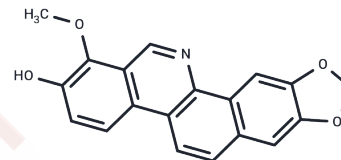


Decarine

Chemical Properties

CAS No. :	54354-62-0
Formula:	C ₁₉ H ₁₃ N ₁ O ₄
Molecular Weight:	319.31
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	Decarine has high antibacterial activity against mycobacterial, gram-positive and gram-negative bacteria, and low cytotoxicity towards human macrophages. Decarine inhibits fMLP/CB-induced elastase release with IC ₅₀ values < or = 5.53 microg/mL.
Targets(IC ₅₀)	Antifection
In vitro	The best results were obtained for a benzophenanthridine alkaloid, Decarine (1), and an N-isobutylamide, N-isobutyl-(2E,4E)-2,4-tetradecadienamide (15), which showed high activity against Mycobacterium tuberculosis H37Rv (MIC of 1.6 µg/ml), and a low macrophage cytotoxicity (IC ₅₀ >60 µg/ml), indicating considerable selective activity. The benzophenanthridine alkaloid 6-acetyldihydroquinidine (6) revealed cytotoxicity (IC ₅₀ 1.7 µg/ml), despite the determined MIC of 6.2-12.5 µg/ml. In infected macrophages, Decarine (1) was able to reduce bacterial survival by almost two log units at a concentration of 6.2 µg/ml 5 days post-drug exposure. Compound 15 exhibited an intermediate activity at drug concentrations ranging from 6.2 to 25 µg/ml[1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1318 mL	15.6588 mL	31.3175 mL
5 mM	0.6264 mL	3.1318 mL	6.2635 mL
10 mM	0.3132 mL	1.5659 mL	3.1318 mL
50 mM	0.0626 mL	0.3132 mL	0.6264 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.

Reference

Zanthoxylum capense constituents with antimycobacterial activity against Mycobacterium tuberculosis in vitro and ex vivo within human macrophages. J Ethnopharmacol. 2013 Mar 7;146(1):417-22.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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