

Kocurin

Chemical Properties

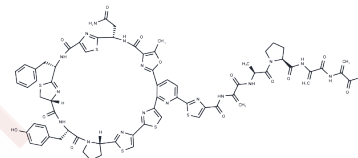
CAS No. : 1374772-61-8

Formula: C₆₉H₆₆N₁₈O₁₃S₅

Molecular Weight: 1515.7

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	Kocurin is a thiazolyl peptide originally isolated from <i>K. palustris</i> and has antibiotic activity. It is active against methicillin-resistant <i>S. aureus</i> (MRSA; MIC = 0.25 µg/ml), as well as <i>B. subtilis</i> and <i>E. faecium</i> in a solid agar test when used at a concentration of 8 µg/ml. Kocurin is also active against <i>E. faecium</i> , <i>E. faecalis</i> , <i>S. epidermidis</i> , and clinical isolates of vancomycin-resistant enterococci (MICs = 0.004-1.025 µg/ml). ²
Targets(IC50)	Others, Antibacterial, Antibiotic
In vivo	In vivo, kocurin (2.5, 5, and 10 mg/ml) increases survival in a mouse model of <i>E. faecium</i> -induced septicemia. It decreases the number of colony forming units (CFUs) in a mouse model of MRSA lung infection.

Solubility Information

Solubility	DMSO: Soluble Ethanol: Soluble Dichloromethane: Soluble Methanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6598 mL	3.2988 mL	6.5976 mL
5 mM	0.132 mL	0.6598 mL	1.3195 mL
10 mM	0.066 mL	0.3299 mL	0.6598 mL
50 mM	0.0132 mL	0.066 mL	0.132 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

Martin, J., da S. Sousa, T., Crespo, G., et al. Kocurin, the true structure of PM181104, an anti-methicillin-resistant *Staphylococcus aureus* (MRSA) thiazolyl peptide from the marine-derived bacterium *Kocuria palustris* Mar. Drugs 11(2)387-398(2013)

Mahajan, G., Thomas, B., Parab, R., et al. In vitro and in vivo activities of antibiotic PM181104 Antimicrob. Agents Chemother. 57(11)5315-5319(2013)

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