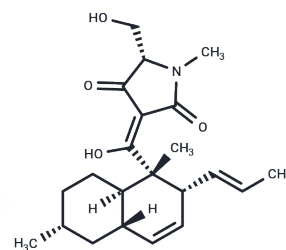


Equisetin

Chemical Properties

CAS No. :	57749-43-6
Formula:	C ₂₂ H ₃₁ N ₁ O ₄
Molecular Weight:	373.49
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	Equisetin, an N-methylserine-derived acyl tetramic acid isolated from the terrestrial fungus <i>Fusarium equiseti</i> NRRL 5537, functions as a Quorum-sensing inhibitor (QSI) that specifically attenuates QS-regulated virulence phenotypes in <i>P. aeruginosa</i> , presenting a potent lead for treating <i>P. aeruginosa</i> infections without hindering bacterial growth. This tetramate-containing natural product possesses antibiotic and cytotoxic properties, effectively inhibiting the growth of Gram-positive bacteria and HIV-1 integrase activity, yet it does not impact Gram-negative bacteria.
Targets(IC50)	Others, Reactive Oxygen Species, HIV Protease, Antibacterial, Antibiotic, AMPK, STAT, Dehydrogenase

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6774 mL	13.3872 mL	26.7745 mL
5 mM	0.5355 mL	2.6774 mL	5.3549 mL
10 mM	0.2677 mL	1.3387 mL	2.6774 mL
50 mM	0.0535 mL	0.2677 mL	0.5355 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

Burmeister HR, et al. Antibiotic produced by *Fusarium equiseti* NRRL 5537. *Antimicrob Agents Chemother.* 1974 Jun; 5(6):634-9.

Vesonder RF, et al. Equisetin, an antibiotic from *Fusarium equiseti* NRRL 5537, identified as a derivative of N-methyl-2, 4-pyrrolidone. *J Antibiot (Tokyo).* 1979 Jul;32(7):759-61.

Lee J, et al. The hierarchy quorum sensing network in *Pseudomonas aeruginosa*. *Protein Cell.* 2015 Jan;6(1):26-41.

Zhang M, et al. Equisetin as potential quorum sensing inhibitor of *Pseudomonas aeruginosa*. *Biotechnol Lett.* 2018 May;40(5):865-870.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481