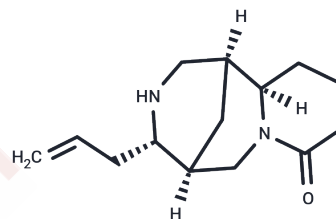


Angustifoline

Chemical Properties

CAS No. :	550-43-6
Formula:	C ₁₄ H ₂₂ N ₂ O
Molecular Weight:	234.34
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	Angustifoline is a natural alkaloid isolated from <i>Lupinus angustifolius</i> L., exhibiting antimicrobial and anticancer properties. It inhibits the growth of various bacteria (<i>S. aureus</i> , <i>B. subtilis</i> , <i>E. coli</i> , <i>P. aeruginosa</i> and <i>B. thuringiensis</i>) and induces autophagy and apoptosis in human colon cancer cells.
Targets(IC50)	Antibacterial
In vitro	Methods: Feeding inhibition was found in the alkaloid fraction of <i>L. polyphyllus</i> extracts. Eight lupin alkaloids present in the extracts were tested at a rate of 25 µg per feeding disk. Results: Among these compounds, 13-trans-cinnamoyloxylupanine and 13-tigloyloxylupanine showed strong inhibitory effects, while lupine, galactoline, 13-hydroxylupine, tetrahydrolupine, Angustifoline, and 17-oxolupanine showed no inhibitory effects. Four alkaloids not present in <i>L. polyphyllus</i> , namely lupine, epilupine, α-isolupine, and lupinyl trans-cinnamate, were inactive at 25 µg per feeding disk.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2673 mL	21.3365 mL	42.673 mL
5 mM	0.8535 mL	4.2673 mL	8.5346 mL
10 mM	0.4267 mL	2.1337 mL	4.2673 mL
50 mM	0.0853 mL	0.4267 mL	0.8535 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

Lupine Alkaloids as Larval Feeding Deterrents for Spruce Budworm, *Choristoneura fumiferana* (Lepidoptera: Tortricidae). *Annals of the Entomological Society of America*, 1984, 77(4):398-400.

Cely-Veloza W, et al. Quinolizidine-Based Variations and Antifungal Activity of Eight *Lupinus* Species Grown under Greenhouse Conditions. *Molecules*. 2022 Jan 4;27(1):305.

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