

Product Data Sheet

Product Name: Viridicatumtoxin

Cat. No.: GC40215

Chemical Properties

Cas. No. 39277-41-3

SMILES O[C@@H]1[C@]2(O)[C@](C(C(C(N)=O)=C(O)C2)=O)(O)C(C3=C(O)C4=C(O)C=C(OC)C5=C4C(C[C@]56C(C)(C)CCC=C6C)=C31)=O

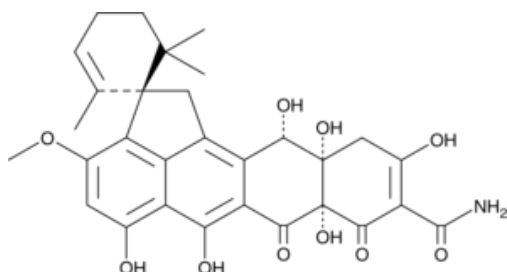
Formula C₃₀H₃₁NO₁₀ M.Wt 565.6

Solubility DMF: Soluble, DMSO: Soluble, Ethanol: Soluble, Methanol: Soluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Viridicatumtoxin is a mycotoxin originally isolated from *Penicillium* that has diverse biological activities, including antimicrobial, cytotoxic, and toxic properties. It inhibits the growth of *B. subtilis*, *M. luteus*, *C. perfringens*, *B. fragilis*, and methicillin-resistant *S. aureus* (MRSA; MICs = 0.39-1.56 µg/ml), as well as *C. albicans*, *S. cerevisiae*, *M. racemosus*, *A. niger*, and *P. chrysogenum* (MICs = 6.2-25 µg/ml), but has no activity against *M. smegmatis*, *E. coli*, *K. pneumoniae*, *P. aeruginosa*, or *S. marcescens* (MICs = >100 µg/ml). Viridicatumtoxin inhibits the production of polyprenyl alcohols by *S. aureus* undecaprenyl pyrophosphate (UPP) synthase, *E. coli* octaprenyl pyrophosphate synthase (OPS), and *S. cerevisiae* dehydrodolichyl pyrophosphate (DedolPP) synthase in vitro (IC₅₀s = 3.1, 21, and 71 µM, respectively). It has cytotoxic effects against human Jurkat T (IC₅₀ = 4.92 µM),

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

chronic lymphocytic leukemia (CLL; LC50 = 0.7-3.5 nM), and bone marrow-derived HS-5 stromal cells. Viridicatumtoxin is toxic to rats and mice when administered intraperitoneally (LD50s = 80 and 90 mg/kg, respectively) and to rats when administered via gastric intubation (LD50 = 122.4 mg/kg), but not to rats or mice when administered orally or through subcutaneous injection.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA