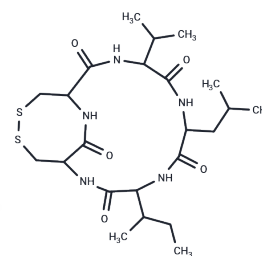


Malformin A

Chemical Properties

CAS No. :	3022-92-2
Formula:	C ₂₃ H ₃₉ N ₅ O ₅ S ₂
Molecular Weight:	529.72
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	Malformin A is a cyclopentapeptide fungal metabolite that has been found in <i>A. niger</i> and has diverse biological activities. It is a plant growth regulator that induces malformations in plant structure. Malformin A inhibits replication of tobacco mosaic virus (TMV) in local lesion and leaf-disc assays (IC ₅₀ s = 19.7 and 45.4 µg/ml, respectively). It is cytotoxic to NCI-H460, MIA PaCa-2, MCF-7, SF-268, and WI-38 cancer cells (IC ₅₀ s = 70, 50, 100, 70, and 100 nM, respectively), inhibits proliferation of PC3 and LNCaP cells (IC ₅₀ s = 130 and 90 nM, respectively), and induces apoptosis and necrosis in PC3 and LNCaP cells. Malformin A also increases the accumulation of reactive oxygen species, decreases the mitochondrial membrane potential, and induces autophagy in PC3 and LNCaP cells. It is toxic to mice when administered intraperitoneally (LD ₅₀ = 3.1 mg/kg) but not orally up to doses of 50 mg/kg.
Targets(IC ₅₀)	Apoptosis,Others

Solubility Information

Solubility	DMSO: 1 mg/mL (1.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8878 mL	9.4389 mL	18.8779 mL
5 mM	0.3776 mL	1.8878 mL	3.7756 mL
10 mM	0.1888 mL	0.9439 mL	1.8878 mL
50 mM	0.0378 mL	0.1888 mL	0.3776 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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