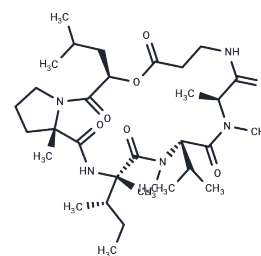


## Destruxin B

## Chemical Properties

CAS No. :	2503-26-6
Formula:	C <sub>30</sub> H <sub>51</sub> N <sub>5</sub> O <sub>7</sub>
Molecular Weight:	593.766
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	Destruxin B is a cyclic peptide with insecticidal and anticancer activity isolated from the insect pathogenic fungus <i>Metarhizium isopliae</i> . Destruxin B induces apoptosis of human non-small cell lung cancer cells through the Bcl-2 family-dependent mitochondrial pathway. Destruxin B through caspase-mediated apoptosis can significantly activate caspase-3 in vitro and in vivo, reducing the proliferation of tumor cells.
Targets(IC50)	Apoptosis,Bcl-2 Family,Others,Caspase
In vitro	Destruxin B (1-30 μM) inhibits cell proliferation by blocking mitochondrial caspase cascade activation in H1299 and A549 cells with IC50 values of 4.1 μM and 4.9 μM, respectively. In A549 cells, Destruxin B (1.25-20.00 μM; 48 hours) induces apoptotic cell death, increases promoter protein PUMA levels, and reduces Mcl-1 degradation resistance. Additionally, Destruxin B (10 or 20 μM; 72 hours) significantly reduces the survival ability of HT-29 human colorectal cancer cells in a time- and dose-dependent manner.
In vivo	Destruxin B (DB) (injection; 0.5-15 mg/kg/d for 6 weeks) reduces tumor growth in a time- and dose-dependent manner.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6842 mL	8.4208 mL	16.8415 mL
5 mM	0.3368 mL	1.6842 mL	3.3683 mL
10 mM	0.1684 mL	0.8421 mL	1.6842 mL
50 mM	0.0337 mL	0.1684 mL	0.3368 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

Wu CC, et al. Destruxin B Isolated from Entomopathogenic Fungus

Lee YP, et al. In vitro and in vivo anticancer effects of destruxin B on human colorectal cancer. Anticancer Res. 2012 Jul;32(7):2735-45.

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