



LKT Laboratories, Inc.

Destruxin B

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Product Information

Product ID D183745

CAS No. 2503-26-6

Chemical Name Destruxin B

Synonym MLS002702090; AC1L8LE6; MEGxm0_000393

Formula $C_{30}H_{51}N_5O_7$

Formula Wt. 593.77

Melting Point 230-240 °C

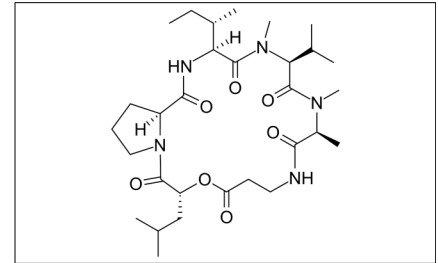
Purity ≥96%

Solubility

Store Temp -20 °C

Ship Temp Ambient

Description Destruxin B, a cyclic depsipeptide, is a secondary metabolite isolated from the fungus *Metarhizium anisopliae*. Each of the mycotoxins, destruxin A, B, and E, were individually found to display antitumor effects on leukemic cells in vitro. In addition, each destruxin was found to produce antiproliferative effects in colon cancer cells and to inhibit the migration and tube formation of human endothelial cells. Although the inhibition of vacuolar-type ATPase by destruxin B has been found to be weaker than bafilomycin A1, inhibition by destruxin B was found to be readily reversible, which makes it more useful as a probe of V-ATPase function. In human colorectal cancer cells destruxin B treatment resulted in suppressed proliferation and induced cell cycle arrest. Administration of destruxin B to human non-Hodgkin lymphoma cells resulted in apoptosis induced by attenuation of the mitochondrial membrane potential.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
D183745	100 µg	\$75.00
D183745	1 mg	\$450.00
D183745	5 mg	\$1800.00

References Yeh CT, Rao YK, Ye M, et al. Preclinical evaluation of destruxin B as a novel Wnt signaling target suppressing proliferation and metastasis of colorectal cancer using non-invasive bioluminescence imaging. *Toxicol Appl Pharmacol.* 2012 May 15;261(1):31-41. PMID: 22465936.

Odiar F, Vey A, Bureau JP. In vitro effect of fungal cyclodepsipeptides on leukemic cells: study of destruxins A, B, and E. *Biol Cell.* 1992;74(3):267-271. PMID: 1628110.

Dornetshuber-Fleiss R, Heffeter P, Mohr T, et al. Destruxins: fungal-derived cyclohexadepsipeptides with multifaceted anticancer and antiangiogenic activities. *Biochem Pharmacol.* 2013 Aug 1;86(3):361-377. PMID: 23747344.

Muroi M, Shiragami N, Takatsuki A. Destruxin B, a specific and readily reversible inhibitor of vacuolar-type H(+)-translocating ATPase. *Biochem Biophys Res Commun.* 1994 Dec 15;205(2):1358-1365. PMID: 7802670.

Chao PZ, Chin YP, Hsu IU, et al. Apoptotic toxicity of destruxin B in human non-Hodgkin lymphoma cells. *Toxicol In Vitro.* 2013 Sep;27(6):1870-1876. PMID: 23751424.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.