LKT Laboratories, Inc.

Beauvericin

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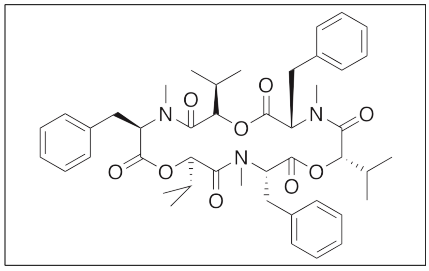
Product Information

Product ID B1603
CAS No. 26048-05-5
Chemical Name

Synonym



Formula $C_{45}H_{57}N_3O_9$
Formula Wt. 783.95
Melting Point 147-148°C
Purity ≥95%
Solubility Insoluble in water. Soluble in ethanol, DMSO, DMF, methanol, acetonitrile.

Bulk quanitites available upon request

Product ID	Size
B1603	1 mg
B1603	5 mg

Store Temp 4°C
Ship Temp Ambient

Description Beauvericin is a cyclic hexadepsipeptide mycotoxin initially produced by species of *Cordyceps*. Beauvericin exhibits pro-oxidative and anticancer activities. In colon adenocarcinoma cells, beauvericin induces oxidative stress by increasing ROS levels and decreasing glutathione levels and also induces mitochondria-dependent apoptosis by decreasing the mitochondrial membrane potential. In non-small cell lung cancer (NSCLC) cells, beauvericin upregulates Bax, Bak, and p-Bad, downregulates p-Bcl-2, activates caspase 3, and increases release of cytochrome c, resulting in apoptosis and cell death. Additionally, this compound stimulates influx of Ca2+ into cells.

References

Prosperini A, Juan-García A, Font G, et al. Beauvericin-induced cytotoxicity via ROS production and mitochondrial damage in Caco-2 cells. Toxicol Lett. 2013 Oct 24;222(2):204-11. PMID: 23850777.

Chen BF, Tsai MC, Jow GM. Induction of calcium influx from extracellular fluid by beauvericin in human leukemia cells. Biochem Biophys Res Commun. 2006 Feb 3;340(1):134-9. PMID: 16343425.

Lin HI, Lee YJ, Chen BF, et al. Involvement of Bcl-2 family, cytochrome c and caspase 3 in induction of apoptosis by beauvericin in human non-small cell lung cancer cells. Cancer Lett. 2005 Dec 18;230(2):248-59. PMID: 16297711.

Harnois DM, Que FG, Celli A, et al. Bcl-2 is overexpressed and alters the threshold for apoptosis in a cholangiocarcinoma cell line. Hepatology. 1997 Oct;26(4):884-90. PMID: 9328309.