LKT Laboratories, Inc.

Myriocin

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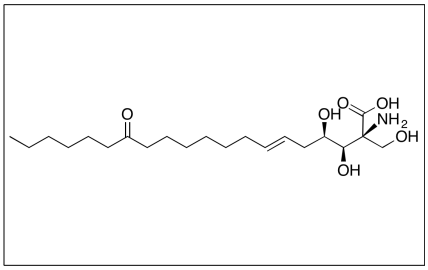
Product Information

Product ID M9634
CAS No. 35891-70-4
Chemical Name

Synonym



Formula $C_{21}H_{39}NO_6$
Formula Wt. 401.54
Melting Point 175-180C
Purity ≥99%, TLC
Solubility DMSO (25 mg/ml; heat briefly in boiling water bath); soluble in dilute base (50 mM NaOH) to ~5 mg/ml and methanol: 2 mg/ml
Store Temp 4°C
Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
M9634	1 mg
M9634	5 mg
M9634	10 mg

Description Myriocin is derived from ascomycete *Isaria sinclairii*. Myriocin is the parent compound of fingolimod, an immunosuppressive sphingosine-1 receptor inhibitor. Myriocin exhibits both immunosuppressive and anticancer activities. This compound inhibits serine palmitoyltransferase, preventing sphingolipid formation. In vitro, myriocin decreases expression of cylin B1, cdc2, and cdc25C and increase expression of p53 and p21, inducing G2/M phase cell cycle arrest and inhibiting growth of melanoma cells. In animal models, myriocin decreases levels of CD4+ lymphocytes and alters the total lymphocyte populations.

References

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Lee YS, Choi KM, Choi MH, et al. Serine palmitoyltransferase inhibitor myriocin induces growth inhibition of B16F10 melanoma cells through G(2) /M phase arrest. Cell Prolif. 2011 Aug;44(4):320-9. PMID: 21645154.

Chiba K, Matsuyuki H, Maeda Y, et al. Role of sphingosine 1-phosphate receptor type 1 in lymphocyte egress from secondary lymphoid tissues and thymus. Cell Mol Immunol. 2006 Feb;3(1):11-9. PMID: 16549044.

Johnson VJ, He Q, Osuchowski MF, et al. Disruption of sphingolipid homeostasis by myriocin, a mycotoxin, reduces thymic and splenic T-lymphocyte populations. Toxicology. 2004 Sep 1;201(1-3):67-75. PMID: 15297021.