LKT Laboratories, Inc.

Splitomicin

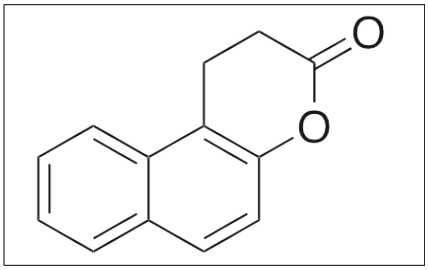
Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID S6247
CAS No. 5690-03-9
Chemical Name

Synonym

Formula $C_{13}H_{10}O_2$
Formula Wt. 198.22
Melting Point
Purity ≥98%
Solubility



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
S6247	5 mg	$68.30
S6247	10 mg	$126.00
S6247	25 mg	$262.50

Store Temp 4°C
Ship Temp Ambient

Description Splitomicin is a cell-permeable lactone that acts as an inhibitor of sirtuins 1 and 2 (SIRT1, SIRT2); sirtuins are considered class III histone deacetylases (HDACs). It displays anti-inflammatory, antioxidative, and antithrombotic activities. In vitro, it promotes translocation of FOXO3a, decreasing cell motility and enhancing activity of paclitaxel. In neutrophils, it decreases production of superoxide anions, suppresses activation of ERK, and increases levels of cAMP. In other cellular models, this compound inhibits thrombin-induced platelet aggregation, preventing increases in thromboxane B2 (TxB2) and release of intracellular Ca2+; this compound may also inhibit phosphodiesterases. Splitomicin also alters RNA splicing activity.

References

Hori YS, Kuno A, Hosoda R, et al. Regulation of FOXOs and p53 by SIRT1 modulators under oxidative stress. PLoS One. 2013 Sep 11;8(9):e73875. PMID: 24040102.

Bonezzi K, Belotti D, North BJ, et al. Inhibition of SIRT2 potentiates the anti-motility activity of taxanes: implications for antineoplastic combination therapies. Neoplasia. 2012 Sep;14(9):846-54. PMID: 23019416.

Liu FC, Day YJ, Liou JT, et al. Splitomicin inhibits fMLP-induced superoxide anion production in human neutrophils by activate cAMP/PKA signaling inhibition of ERK pathway. Eur J Pharmacol. 2012 Aug 5;688(1-3):68-75. PMID: 22634165.

Liu FC, Liao CH, Chang YW, et al. Splitomicin suppresses human platelet aggregation via inhibition of cyclic AMP phosphodiesterase and intracellular Ca++ release. Thromb Res. 2009 Jun;124(2):199-207. PMID: 19327818.

Kuhn AN, van Santen MA, Schwienhorst A, et al. Stalling of spliceosome assembly at distinct stages by small-molecule inhibitors of protein acetylation and deacetylation. RNA. 2009 Jan;15(1):153-75. PMID: 19029308.