

Product Information

Product ID H0169

CAS No. 26833-85-2

Chemical Name

Synonym Cephalotaxine, 4-methyl (2R)-2-hydroxy-2-(3-hydroxy-3-methylbutyl)butanedioate (ester) (9CI)

Formula C₂₈H₃₇NO₉

Formula Wt. 531.59

Melting Point 73-75°C

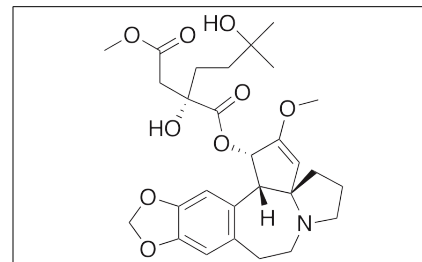
Purity ≥97%

Solubility Does not mix well with water. Soluble in DMSO to 100 mM and in ethanol to 50 mM.

Store Temp -20°C

Ship Temp Ambient

Description Harringtonine is a cephalotaxine alkaloid originally found in *Cephalotaxus hainanensis* Li; it exhibits antiviral and anticancer activities. Harringtonine immobilizes initiated ribosomes, inhibiting protein translation by binding the A site of the 60 S ribosomal subunit and preventing aminoacyl-tRNA binding. Harringtonine inhibits chikungunya virus infection, suppressing replication, RNA production, and viral protein expression. Alone, harringtonine downregulates production of Mcl-1, increases cleavage of PARP, and inhibits cell growth in acute promyelocytic leukemia (APL) cells. Additionally, this compound improves the efficacy of co-administered chemotherapeutic compounds, further inhibiting proliferation and inducing apoptosis in leukemia cells.



Bulk quantities available upon request

Product ID	Size
H0169	5 mg
H0169	10 mg
H0169	25 mg

References Wu C, Shen H, Xia D. Harringtonine induces apoptosis in NB4 cells through down-regulation of Mcl-1. Zhejiang Da Xue Xue Bao Yi Xue Ban. 2013 Jul;42(4):431-6. PMID: 24022932.

Kaur P, Thiruchelvan M, Lee RC, et al. Inhibition of chikungunya virus replication by harringtonine, a novel antiviral that suppresses viral protein expression. Antimicrob Agents Chemother. 2013 Jan;57(1):155-67. PMID: 23275491.

Ingolia NT, Brar GA, Rouskin S, et al. The ribosome profiling strategy for monitoring translation in vivo by deep sequencing of ribosome-protected mRNA fragments. Nat Protoc. 2012 Jul 26;7(8):1534-50. PMID: 22836135.

Zhang C, Li Y, Ma H, et al. Simultaneous multi-parameter observation of Harringtonine-treating HL-60 cells with both two-photon and confocal laser scanning microscopy. Sci China C Life Sci. 2001 Aug;44(4):383-91. PMID: 18726419.

Fresno M, Jiménez A, Vázquez D. Inhibition of translation in eukaryotic systems by harringtonine. Eur J Biochem. 1977 Jan;72(2):323-30. PMID: 319998.

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