

Product Data Sheet

Product Name: Amicoumacin B

Cat. No.: GC46840

Chemical Properties

Cas. No. 82768-33-0

SMILES O=C(CC(C(C(C(NC(C1OC(C2=C(C1)C=CC=C2O)=O)CC(C)C)=O)O)O)N)O

Formula C₂₀H₂₈N₂O₈

M.Wt 424.4

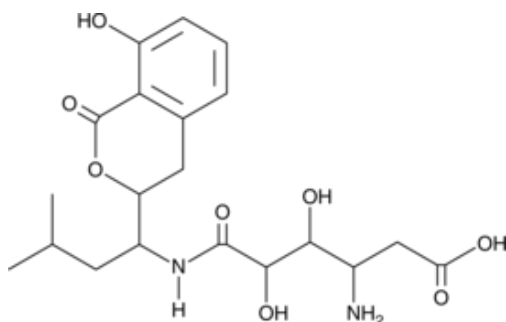
Solubility

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Amicoumacin B is an amicoumacin that has been found in *N. jinanensis* and has quorum-sensing inhibitory activity.¹ It is active against *C. violaceum* (MIC = 250 µg/ml) and reduces the expression of the *C. violaceum* operons *vioA*, *vioB*, *vioD*, and *vioE*, but increases the expression of *vioC*, indicating quorum sensing inhibitory activity.² Amicoumacin B increases the expression of bone morphogenetic protein 2 (BMP2) in MG-63 cells.^{1,3}

1. Sun, W., Zhang, Y.-Q., Huang, Y., et al. *Nocardia jinanensis* sp. nov., an amicoumacin B-producing actinomycete. *Int. J. Syst. Evol. Microbiol.* 59(Pt 2):417-420 (2009).
2. Shi, W.-P., Zeng, H., Wan, C.-X., et al. Amicoumacins from a desert bacterium: quorum sensing inhibitor against *Chromobacterium violaceum*. *Nat. Prod. Res.* (2020).
3. Zhao-Yong, Y., Zhi-Fei, Z., Xiao-Bo, H., et al. Study on the effect of

Caution: Product has not been fully validated for medical applications. For research use only.

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amicoumacin B on up-regulating bmp-2 transcription and expression in MG63 cellsChin. J.
Antibiot.33(4)203-205(2008)

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