

Product Data Sheet

Product Name: IKD-8344

Cat. No.: GC45959

Chemical Properties

Cas. No. 129046-69-1

SMILES O=C1O[C@]([C@@H](C)[C@]2([H])CC[C@@H](C)O2)([H])C[C@@]3([H])O[C@@](C3)([H])[C@@H](C)C(C[C@@]4([H])O[C@](CC4)([H])[C@H](C)C(O[C@]([C@@H](C)[C@]5([H])CC[C@@H](C)O5)([H])C[C@@](CC6)([H])O[C@@]6([H])[C@@H](C)C(C[C@@]([C@]7([H])O[C@]7([H])[C@@H]1C)=O)=O)=O

Formula C₄₈H₇₆O₁₂

M.Wt 845.1

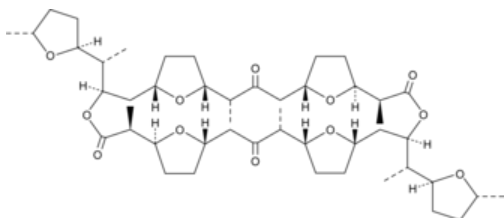
Solubility DMSO: soluble, Ethanol: soluble, Methanol: soluble

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

IKD-8344 is a macrocyclic dilactone originally isolated from an actinomycete species and has diverse biological activities, including anticancer, antimicrobial, and anthelmintic properties.^{1,2,3} It is cytotoxic to L5178Y murine leukemia cells (IC₅₀ = 0.54 ng/ml).¹ IKD-8344 inhibits growth of the mycelial form of *C. albicans* (MIC = 6.25 µg/ml) and potentiates the activity of polymyxin B against the multidrug-resistant pathogenic bacterium *B. cenocepacia*.^{2,3} It is active against *T. spiralis* in vitro and in vivo.¹

[1. Minami, Y., Yoshida, K., Azuma, R., et al. Structure of a novel macrodiolide antibiotic IKD-8344. *Tetrahedron Lett.* 33(48), 7373-7376 (1992).|2. Hwang, E.I., Yun, B.S., Yeo, W.H., et al. Compound IKD-8344, a selective growth inhibitor against the mycelial form of *Candida albicans*, isolated from

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Streptomyces sp. A6792. J. Microbiol. Biotechnol. 15(4), 909-912 (2005).|3. Loutet, S.A., El-Halfawy, O.M., Jassem, A.N., et al. Identification of synergists that potentiate the action of polymyxin B against Burkholderia cenocepacia. Int. J. Antimicrob. Agents 46(4), 376-380 (2015).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA