

Product Data Sheet

Product Name: Azithromycin-d3

Cat. No.: GC46903

Chemical Properties

Cas. No. 163921-65-1

SMILES C[C@@H]([C@@H]([C@H](C(O[C@H](CC)[C@@](C)(O)[C@H](O)[C@H]1C=O)C)O[C@@](O[C@@H](C)[C@@H]2O)([H])C[C@@]2(C)OC)[C@H]([C@](O)(C[C@H](CN1C([2H])([2H])[2H])C)C)O[C@@](O[C@H](C)C[C@@H]3N(C)C)([H])[C@@H]3O

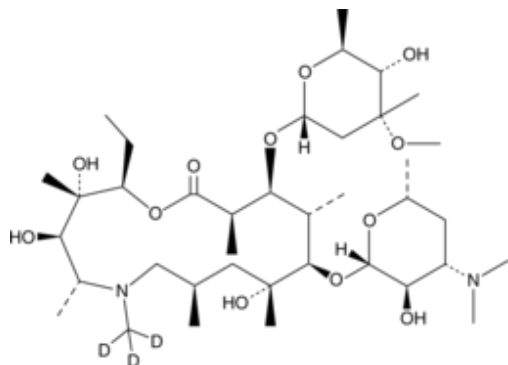
Formula C38H69D3N2O12 M.Wt 752

Solubility DMSO: 100 mg/ml, Ethanol: 100 mg/ml 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

Azithromycin-d₃ is intended for use as an internal standard for the quantification of azithromycin by GC- or LC-MS. Azithromycin is a macrolide antibiotic.¹ It is active against *S. pneumoniae*, *S. aureus*, *N. gonorrhoeae*, *M. pneumoniae*, *H. pylori*, *C. trachomatis*, and *H. influenzae* *in vitro* (MIC₉₀s = <0.01-2 mg/L). Azithromycin increases survival in mouse models of intraperitoneal *S. pyogenes*, *S. pneumoniae*, *E. faecalis*, or *H. influenzae* infection (ED₅₀s = 0.78, 8.7, 12.7, and 30.3 mg/kg,

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respectively).² It also decreases plasma levels of IL-6, TNF- α , and IL-1 β and increases survival in mouse model of LPS-induced sepsis when administered at a dose of 100 mg/kg.³ Formulations containing azithromycin have been used in the treatment of a variety of bacterial infections.

1.Kanatani, M.S., and Guglielmo, B.J.The new macrolides. Azithromycin and clarithromycinWestern J. Med.160(1)31-37(1994) 2.Girard, D., Finegan, S.M., Dunne, M.W., et al.Enhanced efficacy of single-dose versus multi-dose azithromycin regimens in preclinical infection modelsJ. Antimicrob. Chemother.56(2)365-371(2005) 3.Patel, A., Joseph, J., Periasamy, H., et al.Azithromycin in combination with ceftriaxone reduces systemic inflammation and provides survival benefit in a murine model of polymicrobial sepsisAntimicrob. Agents Chemother.62(9)e00752-00718(2018)

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