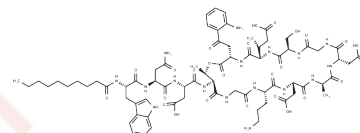


Daptomycin

Chemical Properties

CAS No. :	103060-53-3
Formula:	C72H101N17O26
Molecular Weight:	1620.67
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Daptomycin (LY146032) is a cyclic lipopeptide antibiotic that inhibits GRAM-POSITIVE BACTERIA.
Targets(IC50)	Antibacterial,Antibiotic,DNA/RNA Synthesis
In vivo	Administering daptomycin at a dosage of 10 mg/kg twice daily significantly reduced the amount of organisms per kidney compared to infected untreated controls within 48 hours of treatment initiation. Although a 20 mg/kg dose administered once daily is less effective, it still significantly lowers colony counts after 4 days of therapy, with its efficacy being comparable to that of vancomycin or vancomycin-gentamicin administered twice daily[4].

Solubility Information

Solubility	H2O: 32.4 mg/mL (19.99 mM),Sonication is recommended. DMSO: 252.5 mg/mL (155.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (1.23 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.617 mL	3.0851 mL	6.1703 mL
5 mM	0.1234 mL	0.617 mL	1.2341 mL
10 mM	0.0617 mL	0.3085 mL	0.617 mL
50 mM	0.0123 mL	0.0617 mL	0.1234 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Silverman JA, et al. *Antimicrob Agents Chemother*, 2003, 47(8), 2538-2544.

Zhou Y, Liu M J, Liao X Y, et al. New Attempts to Inhibit Methicillin-Resistant *Staphylococcus aureus* Biofilm? A Combination of Daptomycin and Azithromycin. *Infection and Drug Resistance*. 2023: 7029-7040.

Rybak MJ, et al. *Antimicrob Agents Chemother*, 2000, 44(4), 1062-1066.

Steenbergen JN, et al. *J Antimicrob Chemother*, 2005, 55(3), 283-288.

Miniter PM, et al. Activity of LY146032 in vitro and in experimental enterococcal pyelonephritis. *Antimicrob Agents Chemother*. 1987 Aug;31(8):1199-203.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481