Product Data Sheet

Product Name: Clindamycin
Cat. No.: GC17875

Chemical Properties

Cas. No.	18323-44-9		
Chemical Name	(2S,4R)-N-[(1S,2S)-2-chloro-1-[(2R,3R,4S,5R,6R)-3,4,5-trihydroxy-6-methylsulfanyloxan-2-yl]propyl]-1-methyl-4-propylpyrrolidine-2-carboxamide		
SMILES	CCCC1CC(N(C1)C)C(=O)NC(C2C(C(C(O2)SC)O)O)O)C(C)Cl		
Formula	$C_{18}H_{33}ClN_2O_5S$	M.Wt	424.98
Solubility	≥ 15.3mg/mL in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Clindamycin		

Background

Clindamycin is an oral protein synthesis inhibitory agent that has the ability to suppress the expression of virulence factors in Staphylococcus aureus at sub-inhibitory concentrations (sub-MICs). Clindamycin resistance results from enzymatic methylation of the antibiotic binding site in the 50S ribosomal subunit (23S rRNA). Clindamycin decreases the production of Panton-Valentine leucocidin (PVL), toxic-shock-staphylococcal toxin (TSST-1) or alpha-haemolysin (Hla)[1].

References:
[1]. Hodille E, et al. Clindamycin suppresses virulence expression in inducible clindamycin-resistant Staphylococcus aureus strains. Ann Clin Microbiol Antimicrob. 2018 Oct 20;17(1):38.

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