

Product Data Sheet

Product Name: Amoxicillin trihydrate

Cat. No.: GC14072

Chemical Properties

Cas. No. 61336-70-7

Chemical Name (2S,5R,6R)-6-[[[(2R)-2-amino-2-(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid;trihydrate

SMILES CC1(C(N2C(S1)C(C2=O)NC(=O)C(C3=CC=C(C=C3)O)N)C(=O)O)C.O.O.O

Formula $C_{16}H_{25}N_3O_8S$

M.Wt 419.45

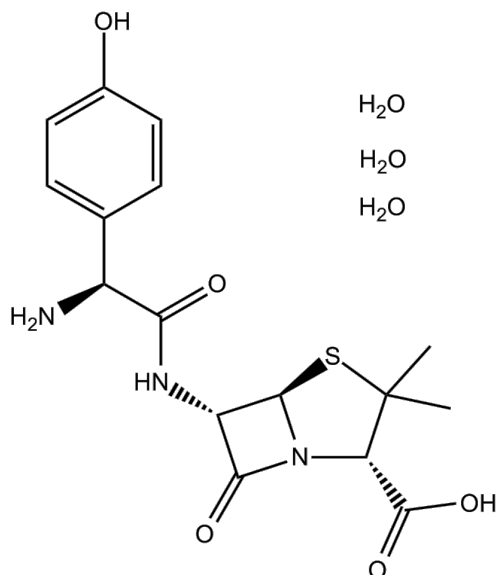
Solubility $\geq 14.8\text{mg/mL}$ in DMSO

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

Amoxicillin trihydrate is a penicillin-structural similar to ampicillin and broad spectrum antibiotic [1].

Amoxicillin trihydrate has shown an antibacterial spectrum comparable to that of ampicillin and be

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better absorbed after oral administration. In addition, the antibacterial activity of Amoxicillin trihydrate against approximately 30 isolates each of Escherichia coli, Proteus mirabilis, Klebsiella, Enterobacter, and indole-positive Proteus species with the MIC values of 0.01 µg/ml, 0.25 µg/ml and 50 µg/ml for Str. viridans, Bacillus anthracis and P. rettgeri, respectively. Apart from these, Amoxicillin trihydrate has been found to produce substantially higher serum levels than the same dose of ampicillin [1,2,3].

References:

- [1] H. Hunter Handsfield, Hugh Clark, James F. Wallace, King K. Holmes and Marvin Turck
Amoxicillin, a New Penicillin Antibiotic
- [2] Bodey GP, Nance J. Amoxicillin: in vitro and pharmacological studies. Antimicrob Agents Chemother. 1972 Apr;1(4):358-62.
- [3] Bodey GP, Nance J. Amoxicillin: in vitro and pharmacological studies. Antimicrob Agents Chemother. 1972 Apr;1(4):358-62.

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