

Stock Solution



TD-S Revision 2.0

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10 mg/ml Ampicillin Anhydrous Stock Solution

Instructions

1. Weigh 0.10 g of Ampicillin Anhydrous ([Ampicillin Anhydrous, GoldBio Catalog # A-302](#) [CAS 69-53-4, mw. = 349.40 g/mol]).
2. Add 10 ml of sterile H₂O. Dissolve completely

Alternatively: Ampicillin Anhydrous is more freely soluble in dilute acidic or basic solution (>50 mg/ml), but can degrade quickly so prepare solutions fresh in 1M ammonium hydroxide or 1M HCl for a higher concentration stock solution.

3. Prewet a 0.22 µm syringe filter by drawing through 5-10 ml of sterile H₂O and discard water.
4. Sterilize Ampicillin stock through the prepared 0.22 µm syringe filter.
5. Stock may be stored in small aliquots at -20°C for 6 months or -70°C for up to 1 year.¹

References

Okerman, Lieve, Johan Van Hende, and Lieven De Zutter. "Stability of frozen stock solutions of beta-lactam antibiotics, cephalosporins, tetracyclines and quinolones used in antibiotic residue screening and antibiotic susceptibility testing." *Analytica Chimica Acta* 586.1 (2007): 284-288.