

f/2 Vitamin Solution

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Abstract

Modified from Bigelow: NCMAM Center. Components to prepare 1 L of f/2 vitamin solution.

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Guidelines

First, prepare primary stock solutions. To prepare final solution, begin with 950 mL of dH2O (autoclaved), dissolve the thiamine, add the amounts of the primary stocks indicated, and bring final volume to 1.0 liter with dH2O. Filter sterilize. Store in refrigerator or freezer.

Before start

Prepare primary stock solutions (in dH₂O) of the following:

- biotin 0.1 g/L
- cyanocobalamin: 1.0 g/L

Filter sterilize through a 0.2 micron PES membrane and store frozen in 1 mL aliquots.

Protocol

Step 1.

Measure 950 mL dH₂O into a 1 L glass bottle.

Step 2.

Dissolve 200 mg thiamine·HCl (vit. B1) into the bottle.

Step 3.

Add 10 mL primary stock solution of biotin (vit. H) (0.1 g/L in dH₂O) into the bottle.

Step 4.

Add 1 mL primary stock solution of cyanocobalamin (vit. B12) (1.0 g/L in dH₂O) into the bottle.

Step 5.

Bring the final volume to 1 L with dH₂O.

Step 6.

Filter sterilize final vitamin solution through a 0.2 micron PES membrane.

Step 7.

Store frozen in 0.5 mL aliquots.