BG-11 Media Version 2

Dr. Steven Wilhelm

Abstract

Please contact Dr. Steven Wilhelm (wilhelm@utk.edu) for additional information regarding this protocol.

Adapted from the original publication Rippka, R., DeRulles, J., Waterbury, J. B., Herdman, M. & Stanier, R. Y. Generic assignments, strain histories and properties of pure cultures of cyanobacteria. *Journal of General Microbiology* **111**, 1-61 (1979).

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Protocol

Step 1.

Add 1 L Milli-Q H_2O to a clean media bottle

Step 2.

Add 1.5 g $NaNO_3$

REAGENTS
Sodium nitrate View by P212121

Step 3.

Add 0.04 g K_2HPO_4

REAGENTS
Potassium phosphate (dibasic) View by P212121

Step 4.

Add 0.075 g $MgSO_4*7H_2O$

REAGENTS
Magnesium sulfate heptahydrate by Contributed by users

Step 5.

Add 0.036 g $CaCl_2*2H_2O$

REAGENTS
Calcium carbonate View by P212121

Step 6.

Add 0.006 g Citric acid

REAGENTS
Citric Acid View by P212121

Step 7.

Add 0.006 g Ferric ammonium citrate

REAGENTS
ammonium ferric sulfate by Contributed by users

Step 8.

Add 0.001 g EDTA (disodium salt)

REAGENTS
EDTA Disodium Salt PubChem CID: 8759 by Contributed by users

Step 9.

Add 0.02 g Na_2CO_3

REAGENTS
Sodium carbonate View by P212121

Step 10.

Add 1 mL Trace metal mix A5

PROTOCOL

. BG-11 Trace metal mix A5

CONTACT: Steven Wilhelm
Step 10.1.

Add 2.86 g H_3BO_3

REAGENTS
Boric acid BP1681 by Fisher Scientific

Step 10.2.

Add 1.81 g $MnCl_2*4H_2O$

REAGENTS
Manganese chloride 7773-01-5 by Fisher Scientific

Step 10.3.

Add 1 L Milli-Q H_2O to a clean media bottle

Step 10.4.

Add 0.222 g $ZnSO_4*7H_2O$

REAGENTS
Zinc sulfate by Contributed by users

Step 10.5.

Add 0.39 g $NaMoO_4*2H_2O$

REAGENTS
Sodium molybdate dihydrate by Contributed by users

Step 10.6.

Add 0.079 g $CuSO_4*5H_2O$

REAGENTS
Copper Sulfate View by P212121

Step 10.7.

Add 49.4 mg $Co(NO_3)_2*6H_2O$

REAGENTS
Cobalt (II) nitrate hexahydrate 10026-22-9 by Fisher Scientific

Step 10.8.

Autoclave at 121°C for 20 m

Step 11.

If making agar, add 10 g to media.

Step 12.

Autoclave at 121ºC for 20 min