5 - BG-11 Medium

For 1 L total

Liquid media:
1. To approximately 900 mL of dH_2O add the first 9 components in the order specified while stirring continuously.
2. Bring total volume to 1 L with dH_2O.
3. Cover and autoclave medium.
4. Allow to cool then store at refrigerator temperature.

Agar media:
1. To approximately 400 mL of dH_2O add the first 9 components in the order specified while stirring continuously.
2. Bring total volume to 500 mL with dH_2O.
3. In a separate container add 15 g of agar to 500 mL of dH_2O.
4. Cover and autoclave both solutions.
5. In a water bath allow both solutions to cool to 45-50°C.
6. Add sterile Sodium Thiosulfate to agar solution and mix well.
7. Combine both agar and liquid solutions, mix well. Note the agar can solidify quickly.
8. Allow to cool then store at refrigerator temperature.

Component	Amount	Stock Solution Concentration	Final Concentration
$NaNO_3$ (Fisher BP360-500)	10 mL/L	30 g/200 mL dH2O	17.6 mM
K_2HPO_4 (Sigma P 3786)	10 mL/L	0.8 g/200 mL dH2O	0.23 mM
$MgSO_4 \cdot 7H_2O$ (Sigma 230391)	10 mL/L	0.15 g/200 mL dH2O	0.03 mM
$CaCl_2 \cdot 2H_2O$ (Sigma C-3881)	10 mL/L	0.72 g/200 mL dH2O	0.24 mM
Citric Acid$\cdot H_2O$ (Fisher A 104)	10 mL/L	0.12 g/200 mL dH2O	0.031 mM
Ferric Ammonium Citrate	10 mL/L	0.12 g/200 mL dH2O	0.021 mM
$Na_2EDTA \cdot 2H_2O$ (Sigma ED255)	10 mL/L	0.02 g/200 mL dH2O	0.0027 mM
Na_2CO_3 (Baker 3604)	10 mL/L	0.4 g/200 mL dH2O	0.19 mM
BG-11 Trace Metals Solution	1 mL/L		
Sodium Thiosulfate Pentahydrate (agar media only,sterile) (Baker 3946)	24.8 g/100 mL		1 mM

Department of Biology / Section of Plant Biology - University of Naples "Federico II"
Via Foria, 223 80139 – Napoli (Italy)
E-mail: info@acuf.net Web: www.acuf.net