

ATCC medium: 2400 *Geobacter pelophilus* medium

KH₂PO₄0.6 g
NH₄Cl0.3 g
MgSO₄ . 7H₂O0.5 g
CaCl₂ . 2H₂O.....0.1 g
Ferric citrate . 3H₂O.....10.0 g
Distilled water.....943.0 ml

Dissolve ferric citrate by heating the water. After cooling the solution to room temperature, adjust the pH to 6.0 and add and dissolve the other ingredients. Flush the medium with 80% N₂, 20% CO₂ and adjust pH to 6.8. After autoclaving at 121C for 15 minutes, add the following from anaerobic stock solutions:

NaHCO₃, 10% w/v.....35.0 ml
Modified SL-10 Solution(see below).....1.0 ml
Selenite-Tungstate Solution (see below).....1.0 ml
Sodium acetate, 8% w/v.....10.0 ml
Sodium ascorbate, 8% w/v.....10.0 ml

Adjust the pH to 6.8 if necessary; dispense in anaerobic tubes under the same gas mixture.

Modified SL-10 Solution:

Add 5.0 mg of sodium EDTA to 10.0 ml of Trace Element Solution SL-10 (see below). Use 1.0 ml of this solution with the other anaerobic stock solutions listed above.

Trace Element Solution SL-10:

HCl (25%).....10.0 ml
FeCl₂ . 4H₂O1.5 g
ZnCl₂70.0 mg
MnCl₂ . 4H₂O100.0 mg
H₃BO₃6.0 mg
CoCl₂ . 6H₂O190.0 mg
CuCl₂ . 2H₂O2.0 mg
NiCl₂ . 6H₂O24.0 mg
Na₂MoO₄ . 2H₂O.....36.0 mg
Distilled water.....990.0 ml

Dissolve FeCl₂ in the HCl, dilute with water, add and dissolve the other salts; adjust pH to 6.0 with NaOH, and fill to 1.0 L with distilled water.

Selenite/Tungstate Solution:

NaOH.....0.5 g
Na₂SeO₃ . 5H₂O.....3.0 mg
Na₂WO₄ . 2H₂O.....4.0 mg
Distilled water.....1000.0 ml