

ATCC Medium: 2626 Peat Medium 1

Major Metals (see below).....10 ml
Trace Metal Solution (see below).....1 ml
DI Water.....1000 ml

Adjust to pH 5 with approx 1-2 drops of 0.1-0.2N HCl.

Major Metals

NaCl.....1.36 g
KCl.....2.68 g
DI Water.....1000 ml

Trace Metal solution

CoCl₂ x 6 H₂O.....0.024 g
ZnCl₂.....0.075 g
H₃BO₃.....0.019 g
NiCl₂ x 6H₂O.....0.024 g
NaMo₄ x 2 H₂O.....0.024 g
FeCl₂ 4 H₂O.....1.344 g
MnSO₄ x 4 H₂O.....0.026 g
MgSO₄ 7 H₂O.....1.556 g
CaCl₂ x 2H₂O.....2.336 g
CuSO₄ x 5 H₂O.....0.009 g
AlK(SO₄)₂ X 12H₂O.....3.446 g

Put tubes in anaerobic chamber (needs N₂) at least 1 hour before or overnight.

Dispense 5ml of media into Balsh tubes and crimp. Autoclave at 121 C.

For best results media should be used within 3-4 weeks

Add the following solutions at time of inoculation.

Add the following to each tube/flask	In 5ml tubes	Final Concentration
83 mM TiNta	0.06ml	1mM
0.5 M Homopipes	0.05ml	5mM
Vitamin Solution (NOT High B-12)	0.05ml	0.2,1.0,0.5,or0.01mg/L of each
2% YE	0.05 ml	0.2mg
50 mM CoM	0.05ml	0.5 mM
20 mM Acetate	0.05ml	0.2 mM

Solution Preparation:

TiNta

7.2 mL of 0.38M NaOH
4.8 mL of 0.5M NaNta
0.55mL of TiCl₃ (15% solution in HCl)

Filter sterilize and gas with N₂

0.5M Homopipes (~pH 5.5-5.75):

Add 7.91g to 50 mL DI water and then 0.9g pellets NaOH. Adjust pH with 10M NaOH/HCl. Filter sterilize and gas with N₂.

Vitamin solution

Biotin.....	20 mg
Folic acid.....	20 mg
Pyridoxine HCl.....	100 mg
Thiamine HCl.....	50 mg
Nicotinic acid.....	50 mg
DL-calcium pantothenate.....	50 mg
Vitamin B12.....	1.0 mg
p-aminobenzoic acid.....	50 mg
lipoic acid.....	50 mg
DI Water.....	1000 ml

Filter sterilize and keep at 4C in dark.

2% YE

Yeast Extract.....	1.0 g
DI Water.....	50 mL

Filter sterilize and gas with N₂.

0.05 M CoM (2 Mercaptoethanesulfonic acid)

Add 0.411g to 50 mL DI water, gas and autoclave.

0.02M Acetate

Add 0.136g to 50mL DI water, filter sterilize and gas with N₂