

### **ATCC Medium: 2865 Rhodovulum Iodosum & R. Robiginosum Medium**

NaCl.....	26.40 g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O.....	5.70 g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O.....	6.80 g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O.....	1.50 g
KCl.....	0.66 g
KBr.....	0.09 g
DI Water.....	965.00 ml

Prepare the medium anaerobically under an atmosphere of N<sub>2</sub>:CO<sub>2</sub> (9:1 vol:vol) and then add:

NaHCO <sub>3</sub> Solution (84 g/l autoclaved under a CO <sub>2</sub> atmosphere).....	30.00 ml/l
KH <sub>2</sub> PO <sub>4</sub> .....	0.40 g/l
NH <sub>4</sub> Cl.....	0.25 g/l
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> .....	0.50 mM
Trace elements.....	1.00 ml/l
Selenite/tungstate solution.....	1.00 ml/l
Vitamin solution.....	1.00 ml/l
Vitamin B12 solution.....	1.00 ml/l
Vitamin B1 solution.....	1.00 ml/l

The pH is adjusted to 6.8

#### **Trace Elements**

FeSO <sub>4</sub> x 7 H <sub>2</sub> O.....	2.10 g
Na <sub>2</sub> EDTA.....	5.20 g
H <sub>3</sub> BO <sub>3</sub> .....	30.00 mg
MnCl <sub>2</sub> x 4 H <sub>2</sub> O.....	100.00 mg
CoCl <sub>2</sub> x 6 H <sub>2</sub> O.....	190.00 mg
NiCl <sub>2</sub> x 6 H <sub>2</sub> O.....	24.00 mg
CuCl <sub>2</sub> x 2 H <sub>2</sub> O.....	2.00 mg
ZnSO <sub>4</sub> x 7 H <sub>2</sub> O.....	144.00 mg
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O.....	36.00 mg
DI Water.....	1000.00 ml

Adjust the pH to 6.0

#### **Selenite/tungstate Solution**

Na <sub>2</sub> SeO <sub>3</sub> x 5 H <sub>2</sub> O.....	6.00 mg
Na <sub>2</sub> WO <sub>4</sub> x 2 H <sub>2</sub> O.....	8.00 mg
NaOH.....	200.00 mg
DI Water.....	1000.00 ml

**Vitamin Solution**

Para-aminobenzoic acid.....	4.00 mg
Biotin.....	1.00 mg
Nicotinate.....	10.00 mg
Pantothenate.....	5.00 mg
Pyridoxin.....	15.00 mg
DI Water.....	100.00 ml

**Vitamin B12 Solution**

Cyanocobalamine.....	5.00 mg
DI Water.....	100.00 ml

**Vitamin B1 Solution**

Thiamine.....	10.00 mg
DI Water.....	100.00 ml

To the medium add 5 mM acetate and 10 mM FeSO<sub>4</sub> (from a 1 M stock solution kept under nitrogen). When the iron is added to the medium a white flocculent precipitate may appear. In the initial stages of growth the precipitate turns orange/brown as the ferrous ions are oxidised to ferrihydrite. Cultivation may take 2-3 weeks at a distance of 30 cm from a 25 W light bulb.