

**ATCC medium: 1306 Nitrate mineral salts medium (NMS)**

MgSO<sub>4</sub> . 7H<sub>2</sub>O .....1.0 g  
CaCl<sub>2</sub> . 6H<sub>2</sub>O .....0.20 g  
Chelated Iron Solution (see below).....2.0 ml  
KNO<sub>3</sub> .....1.0 g  
Trace Element Solution (see below).....0.5 ml  
KH<sub>2</sub>PO<sub>4</sub> .....0.272 g  
Na<sub>2</sub>HPO<sub>4</sub> . 12H<sub>2</sub>O.....0.717 g  
Purified Agar (e.g., Oxoid L28).....12.5 g  
Distilled deionized water.....1.0 L

Adjust pH to 6.8. Autoclave at 121C for 15 minutes.

*Chelated Iron Solution:*

Ferric (III) ammonium citrate\*.....0.1 g  
EDTA, sodium salt.....0.2 g  
HCl (concentrated).....0.3 ml  
Distilled deionized water.....100.0 ml

\*0.05 g of Ferric (III) chloride may be substituted.

Use 2.0 ml of this chelated iron solution per liter of final medium.

*Trace Element Solution:*

EDTA.....500.0 mg  
FeSO<sub>4</sub> . 7H<sub>2</sub>O .....200.0 mg  
ZnSO<sub>4</sub> . 7H<sub>2</sub>O .....10.0 mg  
MnCl<sub>2</sub> . 4H<sub>2</sub>O .....3.0 mg  
H<sub>3</sub>BO<sub>3</sub> .....30.0 mg  
CoCl<sub>2</sub> . 6H<sub>2</sub>O .....20.0 mg  
CaCl<sub>2</sub> . 2H<sub>2</sub>O .....1.0 mg  
NiCl<sub>2</sub> . 6H<sub>2</sub>O .....2.0 mg  
Na<sub>2</sub>MoO<sub>4</sub> . 2H<sub>2</sub>O.....3.0 mg  
Distilled water.....1.0 L

Autoclave at 121C for 15 minutes.