ATCC medium: 2197 *Filobacillus* medium

Peptone.....0.75 g
Yeast extract.....0.75 g
Glucose.....0.75 g
NaCl.....100.0 g
Modified Hutner's Basal Salts (see below).....20.0 ml
Wolfe's Vitamin Solution (see below).....20.0 ml
0.1 M Tris/HCl buffer (pH 7.5).....50.0 ml
Artificial Seawater (see below).....250.0, ml
Distilled water.....660.0 ml

For solid medium, use 18 grams of agar and adjust pH of Tris/HCl buffer to 8.5.
Autoclave at 121C for 15 minutes.
For artificial seawater, use "Instant Ocean" (32 g/L) or the Lyman and Fleming solution below.

Modified Hutner's Basal Salts:
Nitrilotriacetic acid.....10.0 g
$MgSO_4$. $7H_2O$ .....29.7 g
$CaCl_2$. $2H_2O$ .....3.34 g
Ammonium molybdate.....9.25 mg
$FeSO_4$. $7H_2O$ .....99.0 mg
Metals "44" (see below).....50.0 ml
Distilled water to.....1.0 L

Dissolve and neutralize the nitrilotriacetic acid with KOH (7.3 g); add the other ingredients and adjust the pH to 6.6 - 6.8 before bringing the volume to 1.0 L with distilled water.

Metals "44":
EDTA.....0.25 g
$ZnSO_4$. $7H_2O$ .....1.1 g
$FeSO_4$. $7H_2O$ .....0.5 g
$MnSO_4$. $7H_2O$ .....0.154 g
$CuSO_4$. $5H_2O$ .....0.04 g
$Co(NO_3)_2$. $6H_2O$.....0.025 g
$Na_2B_4O_7$. $10H_2O$.....0.018 g
Distilled water.....100.0 ml

Initially add a few drops of H_2SO_4 to the distilled water to retard precipitation.

Wolfe's Vitamin Solution:
Available from ATCC as a sterile ready-to-use liquid (Vitamin Supplement, catalog no. MD-VS).

Biotin	2.0 mg
Folic acid	2.0 mg
Pyridoxine hydrochloride	10.0 mg
Thiamine . HCl	5.0 mg
Riboflavin	5.0 mg
Nicotinic acid	5.0 mg
Calcium D-(+)-pantothenate	5.0 mg
Vitamin B12	0.1 mg
p-Aminobenzoic acid	5.0 mg
Thioctic acid	5.0 mg
Distilled water	1.0 L

Artificial Seawater (Lyman and Fleming, 1940):

NaCl	23.47 g
$MgCl_2$	4.98 g
Na_2SO_4	3.92 g
$CaCl_2$	1.10 g
KCl	0.66 g
$NaHCO_3$	0.19 g
KBr	0.10 g
H_3BO_3	0.026 g
$SrCl_2$	0.024 g
NaF	0.003 g
Distilled water	1.0 L