ATCC Medium: 2491 Geothermobacter ehrlichii Medium

NaCl……..19.0 g
$MgCl_2 \cdot 6H_2O$……..9.0 g
$MgSO_4 \cdot 7H_2O$……0.15 g
$CaCl_2 \cdot 2H_2O$……..0.3 g
KCl…….0.5 g
KH_2PO_4…….0.42 g
$(NH_4)_2SO_4$…….0.10 g
NaBr……..0.05 g
$SrCl_2 \cdot 6H_2O$……0.02 g
KNO_3……1.01 g
Trace Element Solution SL-10 (*see below*)……1.0 ml
Selenite-tungstate Solution (*see below*)……..1.0 ml
Wolfe's Vitamin Solution (*see below*)……...10.0 ml
Yeast extract…….0.10 g
DL-malic acid……1.34 g
$NaHCO_3$……1.7 g
Cysteine-$HCl \cdot H_2O$…….0.05 g
Resazurin……...0.5 mg
DI Water……..1000 ml

Dissolve ingredients (except bicarbonate, cysteine, vitamins and organic substrates), boil medium for 3 min., then cool to room temperature under 80% N_2 + 20% CO_2 gas mixture. Dispense under same gas atmosphere in culture vessels and autoclave. Add vitamins, yeast extract, malic acid and cysteine from sterile, anaerobic stock solutions prepared under N_2 and bicarbonate from a sterile, anaerobic stock solution prepared under 80% N_2 and 20% CO_2. The final pH of the medium should be 6.2.

Trace element solution SL-10
HCl (25%; 7.7 M)……10.0 ml
$FeCl_2 \cdot 4H_2O$……...1.5 g
$ZnCl_2$……70.0 mg
$MnCl_2 \cdot 4H_2O$……100.0 mg
H_3BO_3……6.0 mg
$CoCl_2 \cdot 6H_2O$……..190.0 mg
$CuCl_2 \cdot 2H_2O$……..2.0 mg
$NiCl_2 \cdot 6H_2O$……24.0 mg
$Na_2MoO_4 \cdot 2H_2O$……36.0 mg
DI Water……990.0 ml

First dissolve $FeCl_2$ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1.0 L.

Selenite-tungstate Solution

NaOH……..0.5 g
$Na_2SeO_3 \cdot 5H_2O$……..3.0 mg
$Na_2WO_4 \cdot 2H_2O$……...4.0 mg
DI Water…….1000 ml

Wolfe's Vitamin Solution

(ATCC Vitamin Supplement, catalog no. MD-VS can be substituted).

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 B_{12}……..0.1 mg
p-Aminobenzoic acid…….5.0 mg
Thioctic acid……5.0 mg
DI Water……...1000 ml