ATCC medium: 1964 *Desulfotomaculum acetoxidans* medium

Solution A:

NaCl	1.17 g
$MgCl_2 \cdot 6H_2O$	0.4 g
KCl	0.3 g
$CaCl_2 \cdot 2H_2O$	0.15 g
NH_4Cl	0.27 g
KH_2PO_4	0.2 g
Na_2SO_4	2.84 g
Trace Element Solution SL-7 (see below)	1.0 ml
Sodium acetate	1.4 g
Sodium butyrate	1.4 g
Yeast extract	1.0 g
Resazurin	0.5 mg
$NaHCO_3$	4.5 g
Distilled water	1.0 L

Mix and dissolve all components of Solution A except sodium bicarbonate and heat to boiling. Cool to room temperature under a gas phase of 80% N_2, 20% CO_2. Add sodium bicarbonate and continue gassing with the same gas phase until an equilibrium of pH 6.9 - 7.1 is reached. Tube anaerobically under the same gas phase and autoclave at 121C for 15 minutes. Aseptically add Solutions B and C in appropriate amounts to each tube prior to inoculation. Final pH of completed medium 7.0 - 7.2.

Solution B:

$Na_2S \cdot 9H_2O$	0.36 g
Distilled water	10.0 ml

Autoclave solution B at 121C for 15 minutes under 100% N_2.

Solution C:

Wolfe's Vitamin Solution (see below)	10.0 ml

Filter-sterilize solution C and equilibrate under 100% N_2 before use.

Trace Element solution SL-7:

Hydrochloric acid, 25%.....10.0 ml
$FeCl_2 . 4H_2O$ .....1.5 g
$CoCl_2 . 6H_2O$ .....190.0 mg
$MnCl_2 . 4H_2O$ .....100.0 mg
$ZnCl_2$ .....70.0 mg
H_3BO_3 .....62.0 mg
$Na_2MoO_4 . 2H_2O$.....36.0 mg
$NiCl_2 . 6H_2O$ .....24.0 mg
$CuCl_2 . 2H_2O$ .....17.0 mg
Distilled water.....1.0 L

Dissolve the $FeCl_2 . 4H_2O$ in the concentrated HCl, then dilute. Use 1.0 ml/L of medium.

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