ATCC medium: 1892 *Methanobacterium* medium (DSM 119)

KH_2PO_4	0.5 g
$MgSO_4 \cdot 7H_2O$	0.4 g
NaCl	0.4 g
NH_4Cl	0.4 g
$CaCl_2 \cdot 2H_2O$	50.0 mg
$FeSO_4 \cdot 7H_2O$	2.0 mg
Trace Elements Solution SL-10 (see below)	1.0 ml
Yeast extract	1.0 g
Sodium acetate	1.0 g
Sodium formate	2.0 g
Sludge Fluid (see below)	50.0 ml
$NaHCO_3$	4.0 g
Fatty Acid Mixture (see below)	20.0 ml
Resazurin	1.0 mg
L-Cysteine . HCl . H_2O	0.5 g
$Na_2S \cdot 9H_2O$	0.5 g
Distilled water	940.0 ml

Combine components except sodium bicarbonate and reducing agents. Bring to boiling, then cool to room temperature under an atmosphere of 80% N_2, 20% CO_2. Add sodium bicarbonate and equilibrate under same gas phase for 5-10 minutes. Add cysteine and sodium sulfide. If necessary, adjust for final pH 6.7-7.0. Dispense medium anaerobically under a gas atmosphere of 80% H_2, 20% CO_2. Autoclave at 121C for 15 minutes.

Trace Elements Solution SL-10:

HCl (25%)	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
Distilled water	990.0 ml

Dissolve $FeCl_2$ in the HCl, dilute with water, add and dissolve the other salts, adjust pH to 6.0 with NaOH, and fill up to 1.0 L.

Sludge Fluid:
Add 0.4 % yeast extract to sludge from an anaerobic digester and, after gassing with N2 for a few minutes, incubate it at 37C for 24 hours. Centrifuge the sludge at 13,000 X g; bottle and autoclave the resulting clear supernatant under N2. Store the processed sludge fluid at room temperature in the dark.

Fatty Acid Mixture:
Valeric acid.....0.5 g
Isovaleric acid.....0.5 g
alpha-Methylbutyric acid.....0.5 g
Isobutyric acid.....0.5 g
Distilled water.....20.0 ml

Adjust fatty acid mixture to pH 7.5 with concentrated NaOH.