

ATCC medium: 1939 Modified DSM medium 503 with 0.2% fructose

ATCC Medium 1937 (see below) with xylan replaced by 2.0 g/L filter-sterilized fructose.

ATCC Medium 1937:

Solution A

KH ₂ PO ₄	0.2 g
NH ₄ Cl	0.25 g
NaCl	1.0 g
MgCl ₂ . 6H ₂ O	0.4 g
KCl	0.5 g
CaCl ₂ . 2H ₂ O	0.15 g
Xylan	2.0 g
Modified Wolfe's Minerals (see below)...	10.0 ml
Resazurin	0.5 mg
Distilled water	940.0 ml

Prepare basal medium anaerobically under 80% N₂, 20%₂. Aseptically add the following sterile stock solutions to the cooled, sterile basal medium. Adjust medium for final pH 7.3 (+/- 0.1).

Solution B:

Wolfe's Vitamin Solution (see below)....10.0 ml

Autoclave for 15 minutes at 121C under 100% N₂.

Solution C:

5% NaHCO₃50.0 ml

Autoclave for 15 minutes at 121C under 100% N₂.

Solution D:

Na ₂ S . 9H ₂ O	0.3 g
Distilled water	10.0 ml

Autoclave for 15 minutes at 121C under 100% N₂.

Modified Wolfe's Minerals:

Na ₂ SeO ₃	10.0 mg
NiCl ₂ . 6H ₂ O	10.0 mg
Na ₂ WO ₄ . 2H ₂ O	10.0 mg
Wolfe's Mineral Solution (see below)	1.0 L

Wolfe's Mineral Solution:

Available from ATCC as a sterile ready-to-use liquid (Trace Mineral Supplement, catalog no. MD-TMS.)

Nitrilotriacetic acid.....	1.5 g
MgSO ₄ . 7H ₂ O	3.0 g
MnSO ₄ . H ₂ O	0.5 g
NaCl.....	1.0 g
FeSO ₄ . 7H ₂ O	0.1 g
CoCl ₂ . 6H ₂ O	0.1 g
CaCl ₂	0.1 g
ZnSO ₄ . 7H ₂ O	0.1 g
CuSO ₄ . 5H ₂ O	0.01 g
AlK(SO ₄) ₂ . 12H ₂ O.....	0.01 g
H ₃ BO ₃	0.01 g
Na ₂ MoO ₄ . 2H ₂ O.....	0.01 g
Distilled water.....	1.0 L

Add nitrilotriacetic acid to approximately 500 ml of water and adjust to pH 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.

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