

ATCC medium: 2319 *Desulfonatronum* medium

NH ₄ Cl	1.0 g
Na ₂ S . 9H ₂ O	0.4 g
MgCl ₂ . 6H ₂ O	0.1 g
Yeast extract	0.5 g
NaCl	30.0 g
Na ₂ CO ₃	2.76 g
NaHCO ₃	24.0 g
KCl	0.2 g
K ₂ HPO ₄	0.2 g
Formate	5.0 g
Na ₂ SO ₄	5.0 mM
Wolfe's Vitamin Solution (see below)	2.0 ml
Modified Wolfe's Minerals (see below)	1.0 ml
Distilled water	1.0 L

Prepare and tube medium under anaerobic conditions. Adjust pH to 9.5. Autoclave at 121C for 15 minutes.

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

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.