

ATCC medium: 1612 *Acetobacterium* medium

NH ₄ Cl	1.0 g
KH ₂ PO ₄	0.33 g
K ₂ HPO ₄	0.45 g
MgSO ₄ . 7H ₂ O	0.1 g
Wolfe's Mineral Solution (see below)....	20.0 ml
Wolfe's Vitamin Solution (see below)....	20.0 ml
Yeast extract.....	2.0 g
Fructose (see below).....	10.0 g
Resazurin.....	1.0 mg
NaHCO ₃	10.0 g
L-Cysteine . HCl.....	0.5 g
Na ₂ S . 9H ₂ O	0.5 g
Distilled water.....	1.0 L

Mix all of the ingredients except of fructose. Equilibrate medium with 80% N₂, 20% CO₂ gas mixture until a pH of 7.4 is reached. Tube and autoclave under the same environment. Before inoculation adjust the pH to 8.2 by adding sterile anaerobic Na₂CO₃ (0.25 ml of 5% Na₂CO₃ per 10 ml medium) and add sterile solution of fructose to a final concentration of 1%. For autotrophic growth omit fructose and use a gas atmosphere of 80% H₂, 20% CO₂.

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

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.