

ATCC Medium 2672: Modified Wolfe's Mineral Media (MWMM)

NH ₄ Cl	0.1 g
MgSO ₄ *7 H ₂ O	0.2 g
CaCl ₂ *2H ₂ O	0.1 g
K ₂ HPO ₄	0.05 g
NaHCO ₃	20 mM
Thiosulfate	10 mM
Wolfe's mineral solution (see below)	1.0 mL
Wolfe's vitamin solution (see below)	1.0 mL
Agar	5.0 g
Distilled water	1.0 L

The pH of MWMM medium is adjusted to 6.5 to 6.8 by gassing with a mixture of N₂ and CO₂. The medium is dispensed under a gas phase of 80% N₂ and 20% CO₂ into Balch tubes and autoclaved. The vitamin and mineral solutions are added after autoclaving 10µl per 10ml of medium. For growth the headspace is supplemented with 2-5% O₂.

Wolfe's Mineral Solution:

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

EDTA	0.5 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

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

