

Culture medium for AMB-1 strain



Enriched Magnectic Spirillum Growth Medium (EMSGM)

Distilled water	1.0L
Wolfe's Trace Mineral Supplement (see below)	5.0ml
Wolfe's Vitamins Supplement (see below)	10.0ml
M Ferric Quinate (see below)	2ml
0.1% Resazum	0.45ml
KH ₂ PO ₄	0.68g
NaNO ₃	0.12g
Succinic acid	0.74g
1-cystein	0.05g
Peptone	0.2g
Yeast extract	0.1g

Add components in the order given with stirring.

Adjust to pH 6.75 with NaOH

Autoclave at 121 °C for 15 minutes

Vitamin Supplement (ATCC® MD-VS™)

	mg/L
Folic acid	2.000
Pyridoxine hydrochloride	10.000
Riboflavin	5.000
Biotin	2.000
Thiamine	5.000
Nicotinic acid	5.000
Pantothenic acid	5.000
Vitamin B ₁₂	0.100
p-Aminobenzoic acid	5.000
Thioctic acid	5.000
Monopotassium phosphate	900.000

Trace Mineral Supplement (ATCC® MD-TMS™)

	g/L
EDTA	0.500
MgSO ₄ ·7H ₂ O	3.000
MnSO·H ₂ O	0.500
NaCl	1.000
FeSO ₄ ·7H ₂ O	0.100
Co(NO ₃) ₂ ·6H ₂ O	0.100

CaCl ₂ (anhydrous)	0.100
ZnSO ₄ ·7H ₂ O	0.100
CuSO ₄ ·5H ₂ O	0.010
AlK(SO ₄) ₂ (anhydrous)	0.010
H ₃ BO ₃	0.010
Na ₂ MoO ₄ ·2H ₂ O	0.010
Na ₂ SeO ₃ (anhydrous)	0.001
Na ₂ WO ₄ ·2H ₂ O	0.010
NiCl ₂ ·6H ₂ O	0.020

Dissolve EDTA in 500ml water by adding first 3ml 1M KOH (pH increased from about 2.71 to 6), then 0.1ml KOH each time until pH reaches 6.5

M Ferric Quinate:

FeCl ₃	0.27g
Quinic Acid(Sigma Q-0500)	0.19g
Distilled water	100.0ml

Dissolve and autoclave at 121 °C for 15 minutes