

768. M17 MEDIUM FOR FILOMICROBIUM FUSIFORME

Na-acetate	1.0	g
KNO ₃	1.0	g
Hutner's salts (see below)	20.0	ml
Vitamin solution (see below)	5.0	ml
Artificial seawater (see below)	500.0	ml
Distilled water	475.0	ml

Final pH 7.2.

Artificial sea water:

NaCl	23.48	g
Na ₂ SO ₄	3.92	g
NaHCO ₃	0.19	g
KCl	0.66	g
KBr	0.10	g
MgCl ₂ x 6 H ₂ O	5.00	g
CaCl ₂ x 2 H ₂ O	1.10	g
H ₃ BO ₃	0.03	g
SrCl ₂	0.02	g
NaF	3.00	mg
Distilled water	1000.000	ml

Add NaHCO₃ from a filter-sterilized stock solution when the medium has cooled.

Hutner's salts:

Nitritotriacetic acid (NTA)	10.000	g
MgSO ₄ x 7 H ₂ O	29.700	g
CaCl ₂ x 2 H ₂ O	3.335	g
(NH ₄) ₆ MoO ₇ O ₂₄ x 4 H ₂ O	9.250	mg
FeSO ₄ x 7 H ₂ O	99.000	mg
"Metals 44"	50.000	ml
Distilled water	950.000	ml

Dissolve the nitritotriacetic acid, adjust the pH to 7.0 with KOH (about 7.3 g). Dissolve other salts separately, combine and adjust the pH to 6.8 with NaOH or H₂SO₄.

"Metals 44":

Na-EDTA	250.000	mg
ZnSO ₄ x 7 H ₂ O	1095.000	mg
FeSO ₄ x 7 H ₂ O	500.000	mg
MnSO ₄ x H ₂ O	154.000	mg
CuSO ₄ x 5 H ₂ O	39.200	mg
Co(NO ₃) ₂ x 6 H ₂ O	24.800	mg
Na ₂ B ₄ O ₇ x 10 H ₂ O	17.700	mg
Distilled water	1000.000	ml

Dissolve the EDTA and add a few drops of concentrated H_2SO_4 to retard precipitation of the heavy metal ions.

Vitamin solution (double conc.):

Biotin	4.00	mg
Folic acid	4.00	mg
Pyridoxine-HCl	20.00	mg
Riboflavine	10.00	mg
Thiamine-HCl x 2 H ₂ O	10.00	mg
Nicotinamide	10.00	mg
D-Ca-pantothenate	10.00	mg
Vitamin B ₁₂	0.20	mg
p-Aminobenzoic acid	10.00	mg
Distilled water	1000.00	ml

Store in the dark and cold (5°C).