1121. MMJS MEDIUM (modified)

NaCl	20.00	g
K_2HPO_4	0.09	g
KH_2PO_4	0.07	g
$CaCl_2$ x 2 H_2O	0.80	g
NH_4Cl	1.25	g
$MgSO_4$ x 7 H_2O	4.00	g
$MgCl_2$ x 6 H_2O	3.00	g
KCl	0.33	g
Fe –citrate	0.01	g
FeSO4 x 7 H2O	0.01	g
$Na_2S_2O_3$ x 5 H_2O	3.00	g
Sulfur, powdered	3.00	g
Trace mineral solution (see below)	10.00	ml
Distilled water	1000.00	ml

The pH of the medium is adjusted with NaOH to 6.8. Steam medium for 3 hours on each of 3 successive days. The separately autoclaved, concentrated solutions including each of follows are added to the medium. Then a mix gas (80%N_2, 20%CO_2) is purged for 5 min. Finally, the mix gas (79%N_2, 20%CO_2, 1%O_2) is compressed into gas phase (>80% volume of the tube or bottle) at 2 atm.

Vitamin solution (see below)	final concentration	1.0	ml/l
$NaHCO_3$	final concentration	0.2	%

Trace mineral solution:

Nitrilotriacetic acid	1.500	g
$MnSO_4$ x x H_2O	0.500	g
$CoSO_4$ x 7 H_2O	0.500	g
$ZnSO_4$ x 7 H_2O	0.180	g
$CuSO_4$ x 5 H_2O	0.010	g
$KAI(SO_4)_2$ x 12 H_2O	0.020	g
H_3BO_3	0.010	g
Na_2MoO_4 x 2 H_2O	0.001	g
$SrCl_2$ x 6 H_2O	0.010	g
NaBr	0.010	g
KI	0.010	g
$NiCL_2$ x 6 H_2O	0.100	g
Na_2SeO_3 x 5 H_2O	0.100	g
$Fe_2(SO_4)_3$ x xH_2O	1.000	g
H_2WO_4	0.100	g

Distilled water	1000.000 ml

Vitamin solution:

Biotin	0.0020 g
Folic acid	0.0020 g
Pyridoxine-HCl	0.0100 g
Thiamine-HCl-$2H_2O$	0.0050 g
Riboflavin	0.0050 g
Nicotinic acid	0.0050 g
D-Ca-pantothenate	0.0050 g
Vitamin B_{12}	0.0001 g
p-Aminobenzoic acid	0.0050 g
Lipoic acid	0.0050 g
Distilled water	1000.0000ml