671: THERMOANAEROBACTER (BA) MEDIUM

NH_4Cl	1.00	g
NaCl	0.10	g
$MgCl_2$ x 6 H_2O	0.10	g
$CaCl_2$ x 2 H_2O	0.05	g
K_2HPO_4 x 3 H_2O	0.40	g
Modified Wolin's mineral solution	10.00	ml
Yeast extract	0.75	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na_2CO_3	1.00	g
Cellobiose	4.00	g
Cellulose, Avicel SIGMA (optional)	2.00	g
Wolin's vitamin solution (10x)	1.00	ml
Na_2S x 9 H_2O	0.25	g
Distilled water	1000.00	ml

1. Dissolve ingredients (except carbonate, cellobiose, vitamins and sulfide), then sparge medium with 80% N_2 and 20% CO_2 gas mixture for 30 - 45 min to make it anoxic. Dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. After sterilization add cellobiose, vitamins and sulfide from sterile anoxic stock solutions prepared under 100% N_2 gas and carbonate from a sterile anoxic stock solution prepared under 80% N_2 and 20% CO_2 gas mixture. Stock solutions of cellobiose and vitamins should be sterilized by filtration. Adjust pH of complete medium to 7.0, if necessary.

2. Note: Some strains can be adapted to cellulose as substrate using 2.00 g/l Avicel microcrystalline cellulose (SIGMA).

For DSM 29083, DSM 25963: Use 4.00 g/l D-xylose (sterilized separately) instead of cellobiose.

Wolin's vitamin solution (10x) (from medium 120)

Biotin	20.00	mg
Folic acid	20.00	mg
Pyridoxine hydrochloride	100.00	mg
Thiamine HCl	50.00	mg
Riboflavin	50.00	mg
Nicotinic acid	50.00	mg
Calcium D-(+)-pantothenate	50.00	mg
Vitamin B_{12}	1.00	mg
p-Aminobenzoic acid	50.00	mg
(DL)-alpha-Lipoic acid	50.00	mg
Distilled water	1000.00	ml

© 2022 DSMZ - All rights reserved

Modified Wolin's mineral solution (from medium 141)

Nitrilotriacetic acid	1.50	g
$MgSO_4$ x 7 H_2O	3.00	g
$MnSO_4$ x H_2O	0.50	g
NaCl	1.00	g
$FeSO_4$ x 7 H_2O	0.10	g
$CoSO_4$ x 7 H_2O	0.18	g
$CaCl_2$ x 2 H_2O	0.10	g
$ZnSO_4$ x 7 H_2O	0.18	g
$CuSO_4$ x 5 H_2O	0.01	g
$AlK(SO_4)_2$ x 12 H_2O	0.02	g
H_3BO_3	0.01	g
Na_2MoO_4 x 2 H_2O	0.01	g
$NiCl_2$ x 6 H_2O	0.03	g
Na_2SeO_3 x 5 H_2O	0.30	mg
Na_2WO_4 x 2 H_2O	0.40	mg
Distilled water	1000.00	ml

First dissolve nitrilotriacetic acid and adjust pH to 6.5 with KOH, then add minerals. Adjust final to pH 7.0 with KOH.

© 2022 DSMZ - All rights reserved