1315: ANAEROBIC THAUERA MEDIUM

This recipe contains strain-specific modifications for *Acidovorax sp.* DSM 15015 *

Final pH: 7.1 - 7.5
Final volume: 1000 ml

KNO_3	0.85	g
$NaHCO_3$	2.52	g
$CaCl_2$	0.01	g
$MgSO_4$ x 7 H_2O	0.50	g
$MnSO_4$	0.01	g
NH_4Cl	0.30	g
NaCl	0.05	g
Selenite and tungstate solution	2.00	ml
Distilled water	884.00	ml
Phosphate solution	100.00	ml
Acetate solution 98.0 g/L	10.00	ml
Vitamin solution	5.00	ml
Trace element solution SL-10	1.00	ml
3,4-dihydroxybenzoate	0.77	g/l

Distribute to gas tight vessels, gas with 90% N_2 +10% CO_2 to achieve anaerobic conditions and autoclave. After cooling, add the phosphate solution, substrate solution, vitamin solution and trace element solution. After mixing, pH should be 7.1 - 7.5.

* Replace fatty acid by 3,4-dihydroxybenzoate (0.77 g/l)

Phosphate solution

Na_2HPO_4 x 2 H_2O	1.45	g
KH_2PO_4	0.25	g
Distilled water	100.00	ml

Distribute to gas tight vessels under N_2, autoclave.

Acetate solution 98.0 g/L

K-acetate	9.80	g
Distilled water	100.00	ml

Filter sterilize and gas with N_2. For strains DSM 12141, DSM 12142, DSM 11243 and DSM 12144, acetate may be replaced by Na-capronate (stock solution 2.76 g/100 ml).

Vitamin solution (from medium 461)

Vitamin B_{12}	50.00	mg
Pantothenic acid	50.00	mg
Riboflavin	50.00	mg
Pyridoxamine hydrochloride	10.00	mg
Biotin	20.00	mg
Folic acid	20.00	mg
Nicotinic acid	25.00	mg
Nicotine amide	25.00	mg
~~alpha-lipoic acid~~	~~50.00~~	~~mg~~
p-Aminobenzoic acid	50.00	mg
Thiamine-HCl x 2 H_2O	50.00	mg
Distilled water	1000.00	ml

Stir for some hours, filter sterilize the solution.

Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
$FeCl_2$ x 4 H_2O	1.50	g
$ZnCl_2$	70.00	mg
$MnCl_2$ x 4 H_2O	100.00	mg
H_3BO_3	6.00	mg
$CoCl_2$ x 6 H_2O	190.00	mg
$CuCl_2$ x 2 H_2O	2.00	mg
$NiCl_2$ x 6 H_2O	24.00	mg
Na_2MoO_4 x 2 H_2O	36.00	mg
Distilled water	990.00	ml

First dissolve $FeCl_2$ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.

Selenite and tungstate solution

Distilled water	1000.00	ml
NaOH	0.50	g
Na_2SeO_3 x 5 H_2O	3.00	mg
Na_2WO_4 x 2 H_2O	4.00	mg

First dissolve NaOH, subsequently the metal salts. Distribute to gas tight vessels under N_2, autoclave.