1049: SELENATE REDUCER MEDIUM

This recipe contains strain-specific modifications for *Sedimenticola selenatireducens* DSM 17993 *

Final pH: 7.0
Final volume: 107 ml

Solution A	100.00	ml
Solution B	1.00	ml
Solution C	2.50	ml
Solution D	1.00	ml
Solution E	0.10	ml
Solution F	0.50	ml
Solution G	1.00	ml
Solution H	1.00	ml

1. After cooling of medium A, add per 100 ml: 1.0 ml solution B, 2.5 ml solution C, 1.0 ml solution D, 0.1 ml solution E, 0.5 ml solution F, 1.0 ml solution G and 1.0 ml solution H.

2. Adjust pH to 7.0.

3. It is recommended to cultivate strain DSM 17993 on agar plates which may be prepared under aerobic conditions. Plates are then preincubated under anaerobic conditions prior to inoculation. They will stay pink coloured.

4. For liquid medium, prepare solution A, distribute to anaerobic cultivation vessels, heat to the boil and cool to room temperature while gassing with N_2 : CO_2 (80:20). Close vessels and autoclave. Prepare solutions B, C, D, E and H under anaerobic conditions and autoclave. Solutions F and H are filter sterilized and flushed with N_2. Selenate (solution B) might be replaced by nitrate (solution: 1.00 g KNO_3 in 10 ml).

* It is recommended to cultivate strain DSM 17993 on agar plates which may be prepared under aerobic conditions. Plates are then preincubated under anaerobic conditions prior to inoculation. They will stay pink coloured.

Solution A

DL-Na-lactate	1.12	g
KCl	1.30	g
KH_2PO_4	0.20	g
NaCl	23.00	g
NH_4Cl	0.50	g
$CaCl_2$ x 2 H_2O	0.10	g
$MgCl_2$ x 6 H_2O	3.00	g
Resazurin	0.50	mg
Agar	15.00	g

Distilled water	940.00	ml

Solution B

Na_2SeO_4	1.89	g
Distilled water	10.00	ml

Solution C

$NaHCO_3$	1.00	g
Distilled water	10.00	ml

Solution D

Na_2S x 9 H_2O	0.10	g
Distilled water	10.00	ml

Solution E

Na_2SeO_3	3.00	mg
Na_2WO_4	8.00	mg
Distilled water	100.00	ml

Solution F

Vitamin solution	1.00	ml

Solution G

Trace element solution SL-10	1.00	ml
Distilled water	9.00	ml

Solution H

1,4-Naphthoquinone	2.00	mg
Hemin	0.50	mg
Distilled water	100.00	ml

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.

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.