

1055: DESULFOVERMICULUS MEDIUM

This recipe contains strain-specific modifications for *Desulfonatronovibrio halophilus* DSM 24312 *

Final pH: 7.0 - 7.2

Final volume: 1003 ml

NaCl	100.00	g
MgSO ₄ x 7 H ₂ O	10.00	g
KCl	6.00	g
CaCl ₂ x 2 H ₂ O	0.40	g
NH ₄ Cl	1.00	g
KH ₂ PO ₄	0.10	g
Yeast extract	0.50	g
Trace element solution SL-10	1.00	ml
Selenite-tungstate solution	1.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Na ₂ CO ₃	1.50	g
Na-L-lactate	2.50	g
Wolin's vitamin solution (10x)	1.00	ml
Na ₂ S x 9 H ₂ O	0.30	g
Na acetate	0.16	g
Na-formate	3.40	g
Na ₂ S ₂ O ₃	5.00	g
Distilled water	1000.00	ml

Dissolve ingredients (except carbonate, lactate, vitamins, and sulfide) and sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add lactate, vitamins (sterilized by filtration) and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Adjust pH of the complete medium to 7.0 - 7.2, if necessary.

* Omit Na-L-lactate and add 3.4 g/l Na-formate, 0.16 g/l Na-acetate and 5.0 g/l Na₂S₂O₃ from sterile anoxic stock solutions prepared under 100% N₂ gas.

Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
FeCl ₂ x 4 H ₂ O	1.50	g
ZnCl ₂	70.00	mg
MnCl ₂ x 4 H ₂ O	100.00	mg
H ₃ BO ₃	6.00	mg

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CoCl ₂ x 6 H ₂ O	190.00	mg
CuCl ₂ x 2 H ₂ O	2.00	mg
NiCl ₂ x 6 H ₂ O	24.00	mg
Na ₂ MoO ₄ x 2 H ₂ O	36.00	mg
Distilled water	990.00	ml

First dissolve FeCl₂ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.

Selenite-tungstate solution (from medium 385)

NaOH	0.50	g
Na ₂ SeO ₃ x 5 H ₂ O	3.00	mg
Na ₂ WO ₄ x 2 H ₂ O	4.00	mg
Distilled water	1000.00	ml

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