

1095: NATRANAEROBIUS MEDIUM

This recipe contains strain-specific modifications for *Natranaerobius sp.* DSM 23380 *

NaCl	100.00	g
KH ₂ PO ₄	0.20	g
MgCl ₂	0.10	g
NH ₄ Cl	0.50	g
Yeast extract (OXOID)	10.00	g
Tryptone (BD Bacto)	10.00	g
Trace element solution SL-10	1.00	ml
Na ₂ CO ₃	68.00	g
NaHCO ₃	38.00	g
L-Cysteine HCl x H ₂ O	0.70	g
Wolin's vitamin solution (10x)	1.00	ml
Sucrose	5.00	g
D-Glucose	5.00	g
Distilled water	1000.00	ml

Dissolve ingredients (except carbonates, cysteine, sucrose and vitamins), then sparge medium with 100% N₂ gas for 30 - 45 min to make it anoxic. Add carbonate, hydrogencarbonate and cysteine and adjust pH to 8.5. Dispense medium under 100% N₂ gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. After autoclaving add sucrose and vitamins from sterile anoxic stock solutions prepared under 100% N₂ gas and sterilized by filtration.

* Adjust pH of medium to 9.5 and replace sucrose with 5.0 g/l D-glucose added from a sterile anoxic stock solution after autoclaving.

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
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.

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