

490: METHANOLOBUS OREGONENSIS MEDIUM

This recipe contains strain-specific modifications for *Methanoblobus taylorii* DSM 9005 *

Final pH: * 8.0

Final volume: 1010 ml

Yeast extract (OXOID)	2.00	g
Trypticase peptone (BD BBL)	2.00	g
NaCl	29.00	g
KCl	1.50	g
NH ₄ Cl	1.00	g
K ₂ HPO ₄ x 3 H ₂ O	0.40	g
MgCl ₂ x 6 H ₂ O	1.70	g
2-Mercaptoethanesulfonic acid (coenzyme M)	0.50	g
Modified Wolin's mineral solution	10.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Na ₂ CO ₃	2.50	g
Trimethylamine-HCl	2.00	g
Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients except carbonate, trimethylamine and sulfide, then sparge medium with 100% N₂ gas for 30 - 45 min to make it anoxic. Distribute medium under the same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Before use add trimethylamine and sulfide from sterile anoxic stock solutions autoclaved 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 8.5 with a sterile anoxic stock solution of Na₂CO₃ (5% w/v).

* Adjust pH of complete medium to 8.0.

Modified Wolin's mineral solution (from medium 141)

Nitrilotriacetic acid	1.50	g
MgSO ₄ x 7 H ₂ O	3.00	g
MnSO ₄ x H ₂ O	0.50	g
NaCl	1.00	g
FeSO ₄ x 7 H ₂ O	0.10	g
CoSO ₄ x 7 H ₂ O	0.18	g
CaCl ₂ x 2 H ₂ O	0.10	g
ZnSO ₄ x 7 H ₂ O	0.18	g
CuSO ₄ x 5 H ₂ O	0.01	g
AlK(SO ₄) ₂ x 12 H ₂ O	0.02	g
H ₃ BO ₃	0.01	g

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$\text{Na}_2\text{MoO}_4 \times 2 \text{H}_2\text{O}$	0.01	g
$\text{NiCl}_2 \times 6 \text{H}_2\text{O}$	0.03	g
$\text{Na}_2\text{SeO}_3 \times 5 \text{H}_2\text{O}$	0.30	mg
$\text{Na}_2\text{WO}_4 \times 2 \text{H}_2\text{O}$	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.