

1610: METHYLOCEANIBACTER MEDIUM (NaCl-dANMS)

Final pH: 7.8

Final volume: 1000 ml

| | | |
|---|---------|----|
| Solution 1 (50x salt stock) | 20.00 | ml |
| Solution 2 (100 mM Fe EDTA) | 0.40 | ml |
| Solution 3 (100 mM KH₂PO₄) | 10.00 | ml |
| Solution 4 (10 mM CuSO₄ x 5 H₂O) | 0.10 | ml |
| Solution 5 (30% NaCl) | 100.00 | ml |
| Solution 6 (100 mM NH₄Cl) | 20.00 | ml |
| Solution 7 (100 mM KNO₃) | 20.00 | ml |
| Solution 8 (100 mM Hepes) | 50.00 | ml |
| Solution 9 (100µM lanthanides) | 1.00 | ml |
| Trace element solution | 1.00 | ml |
| Distilled water | 1000.00 | ml |
| Methanol (filter sterilized) | 10.00 | ml |

1. Dilute 20 ml of solution 1 to 700ml with distilled water.
2. Add 100mL of solution 5, 50 mL of solution 8, 20mL of solution 6 and 7 and 10 mL of solution 3.
3. Add 1ml trace element solution.
4. Add 0.4 mL solution 2.
5. Add 0.1 mL solution 4.
6. Add 1.0 mL solution 9.
7. Dissolve and bring to 1L.
8. Adjust pH to 7.8 with HCl or NaOH. Autoclave medium.
9. After autoclaving add 10mL per liter of filter sterilized methanol.

Trace element solution

| | | |
|---|------|----|
| EDTA | 0.50 | g |
| FeSO ₄ x 7 H ₂ O | 0.20 | g |
| ZnSO ₄ | 0.01 | g |
| MnCl ₂ | 3.00 | mg |
| H ₃ BO ₃ | 0.03 | g |
| CoCl ₂ x 6 H ₂ O | 0.02 | g |
| CuCl ₂ x 5 H ₂ O | 0.01 | g |
| NiCl ₂ x 6 H ₂ O | 0.02 | g |
| Na ₂ MoO ₄ x 2 H ₂ O | 2.00 | mg |

| | | |
|-----------------|---------|----|
| Distilled water | 1000.00 | ml |
|-----------------|---------|----|

May be stored at 4°C in the dark

Solution 1 (50x salt stock)

| | | |
|--|---------|----|
| MgSO ₄ x 6 H ₂ O | 10.00 | g |
| CaCl ₂ x 2 H ₂ O | 1.50 | g |
| Distilled water | 1000.00 | ml |

Dissolve the ingredients listed above (in that order) in about 700 ml of distilled water, and then make up to 1 litre

Solution 2 (100 mM Fe EDTA)

| | | |
|-----------------|---------|----|
| Fe(III)-EDTA | 36.05 | g |
| Distilled water | 1000.00 | ml |

Solution 3 (100 mM KH₂PO₄)

| | | |
|---------------------------------|---------|----|
| KH ₂ PO ₄ | 13.60 | g |
| Distilled water | 1000.00 | ml |

Solution 4 (10 mM CuSO₄ x 5 H₂O)

| | | |
|--|---------|----|
| CuSO ₄ x 5 H ₂ O | 2.50 | g |
| Distilled water | 1000.00 | ml |

Solution 5 (30% NaCl)

| | | |
|-----------------|---------|----|
| NaCl | 30.00 | g |
| Distilled water | 1000.00 | ml |

Solution 6 (100 mM NH₄Cl)

| | | |
|--------------------|---------|----|
| NH ₄ Cl | 5.30 | g |
| Distilled water | 1000.00 | ml |

Solution 7 (100 mM KNO₃)

| | | |
|------------------|---------|----|
| KNO ₃ | 10.10 | g |
| Distilled water | 1000.00 | ml |

Solution 8 (100 mM Hepes)

| | | |
|-------|-------|---|
| HEPES | 23.80 | g |
|-------|-------|---|

| | | |
|-----------------|---------|----|
| Distilled water | 1000.00 | ml |
|-----------------|---------|----|

Solution 9 (100µM lanthanides)

| | | |
|--|---------|----|
| CeCl ₃ x 7 H ₂ O | 0.04 | g |
| LaCl ₃ x 7 H ₂ O | 0.04 | g |
| NdCl ₃ x 6 H ₂ O | 0.04 | g |
| PrCl ₃ x H ₂ O | 0.02 | g |
| Distilled water | 1000.00 | ml |