

874: FERROPLASMA ACIDIPHILUM MEDIUM

This recipe contains strain-specific modifications for *Acidiplasma aeolicum* DSM 18409 *

Final pH: 1.6 - 1.8

Final volume: 1000 ml

Solution A	930.00	ml
Solution B	50.00	ml
Solution C	10.00	ml
Solution D	10.00	ml

Add solutions B and C to solution A, adjust pH of the combined solution to 1.6 - 1.8 with H_2SO_4 , then sterilize using membrane filter and dispense in sterile culture vessels. Prior to use, add the appropriate volume of solution D sterilized by autoclaving.

* Replace trace elements with 1.00 ml/l of trace element solution SL-10 (see medium 320). Supplement medium prior to inoculation with 1.50 g/l potassium tetrathionate added from a stock solution sterilized by filtration.

Solution A

$\text{MgSO}_4 \times 7 \text{ H}_2\text{O}$	0.40	g
$(\text{NH}_4)_2\text{SO}_4$	0.20	g
KCl	0.10	g
K_2HPO_4	0.10	g
Potassium tetrathionate	1.50	g
Distilled water	930.00	ml

Solution B

$\text{FeSO}_4 \times 7 \text{ H}_2\text{O}$	25.00	g
H_2SO_4 (1 N)	40.00	ml
Distilled water	10.00	ml

Solution C

Trace element solution	10.00	ml
Trace element solution SL-10	1.00	ml

Solution D

Yeast extract (OXOID)	0.20	g
Distilled water	10.00	ml

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Trace element solution (from medium 158)

$\text{FeCl}_3 \times 6 \text{ H}_2\text{O}$	1.93	g
$\text{MnCl}_2 \times 4 \text{ H}_2\text{O}$	0.18	g
$\text{Na}_2\text{B}_4\text{O}_7 \times 10 \text{ H}_2\text{O}$	0.45	g
$\text{ZnSO}_4 \times 7 \text{ H}_2\text{O}$	22.00	mg
$\text{CuCl}_2 \times 2 \text{ H}_2\text{O}$	5.00	mg
$\text{Na}_2\text{MoO}_4 \times 2 \text{ H}_2\text{O}$	3.00	mg
$\text{VOSO}_4 \times 5 \text{ H}_2\text{O}$	3.80	mg
$\text{CoSO}_4 \times 7 \text{ H}_2\text{O}$	2.00	mg
Distilled water	1000.00	ml

Trace element solution SL-10* (from medium 320)

HCl (25%)	10.00	ml
$\text{FeCl}_2 \times 4 \text{ H}_2\text{O}$	1.50	g
ZnCl_2	70.00	mg
$\text{MnCl}_2 \times 4 \text{ H}_2\text{O}$	100.00	mg
H_3BO_3	6.00	mg
$\text{CoCl}_2 \times 6 \text{ H}_2\text{O}$	190.00	mg
$\text{CuCl}_2 \times 2 \text{ H}_2\text{O}$	2.00	mg
$\text{NiCl}_2 \times 6 \text{ H}_2\text{O}$	24.00	mg
$\text{Na}_2\text{MoO}_4 \times 2 \text{ H}_2\text{O}$	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.