Microorganisms



88: SULFOLOBUS MEDIUM

This recipe contains strain-specific modifications for Sulfuracidifex metallicus DSM 6482 *

Final pH: 2.0 Final volume: 1010 ml

| (NH ₄) ₂ SO ₄ | 1.30 | g |
|---|---------|----|
| KH ₂ PO ₄ | 0.28 | g |
| $MgSO_4 \times 7 H_2O$ | 0.25 | g |
| $CaCl_2 \times 2 H_2O$ | 0.07 | g |
| $FeCl_3 \times 6 H_2O$ | 0.02 | g |
| Allen's trace element solution | 10.00 | ml |
| Yeast extract (OXOID) | 0.20 | g |
| Sulfur powder | 5.00 | g |
| Distilled water | 1000.00 | ml |

Dissolve ingredients (except yeast extract or other substrates), adjust pH of the salt solution at room temperature to 2.0 using 10 N H_2SO_4 and autoclave. Yeast extract and other organic substrates are sterilized separately by autoclaving of a 10% (w/v) stock solution at neutral pH.

* Reduce the amount of yeast extract to 0.20 g/l and supplement the medium with 5.00 g/l powdered sulfur. Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and add aseptically to the autoclaved medium.

Allen's trace element solution (from medium 88)

| $MnCl_2 \times 4 H_2O$ | 180.00 | mg |
|---|---------|----|
| Na ₂ B ₄ O ₇ x 10 H ₂ O | 450.00 | mg |
| $ZnSO_4 \times 7 H_2O$ | 22.00 | mg |
| $CuCl_2 \ge H_2O$ | 5.00 | mg |
| Na ₂ MoO ₄ x 2 H ₂ O | 3.00 | mg |
| $VOSO_4 \times 2 H_2O$ | 3.00 | mg |
| $CoSO_4 \times 7 H_2O$ | 1.00 | mg |
| Distilled water | 1000.00 | ml |

Adjust pH of final solution to 2 with 1 N HCl.