

## 896: SOLIDESULFOVIBRIO MEDIUM

|  |         |    |
|--|---------|----|
| KH <sub>2</sub> PO <sub>4</sub>          | 0.20    | g  |
| NH <sub>4</sub> Cl                       | 0.06    | g  |
| <b>Fe(III) quinate solution 0.01 M</b>   | 2.00    | ml |
| <b>Modified Wolin's mineral solution</b> | 4.00    | ml |
| Na <sub>2</sub> -fumarate                | 0.58    | g  |
| Na-pyruvate                              | 0.44    | g  |
| <b>Wolin's vitamin solution (10x)</b>    | 1.00    | ml |
| L-Cysteine HCl x H <sub>2</sub> O        | 0.05    | g  |
| Distilled water                          | 1000.00 | ml |

Dissolve ingredients except vitamins and cysteine, adjust pH to 7.2 and sparge medium with 100% N<sub>2</sub> gas for 30 - 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Prior to inoculation add vitamins and cysteine from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas. Vitamins should be sterilized by filtration. Adjust pH of complete medium to 7.0, if necessary.

### Modified Wolin's mineral solution (from medium 141)

|  |         |    |
|--|---------|----|
| Nitrolotriacetic acid                                    | 1.50    | g  |
| MgSO <sub>4</sub> x 7 H <sub>2</sub> O                   | 3.00    | g  |
| MnSO <sub>4</sub> x H <sub>2</sub> O                     | 0.50    | g  |
| NaCl   | 1.00    | g  |
| FeSO <sub>4</sub> x 7 H <sub>2</sub> O                   | 0.10    | g  |
| CoSO <sub>4</sub> x 7 H <sub>2</sub> O                   | 0.18    | g  |
| CaCl <sub>2</sub> x 2 H <sub>2</sub> O                   | 0.10    | g  |
| ZnSO <sub>4</sub> x 7 H <sub>2</sub> O                   | 0.18    | g  |
| CuSO <sub>4</sub> x 5 H <sub>2</sub> O                   | 0.01    | g  |
| AlK(SO <sub>4</sub> ) <sub>2</sub> x 12 H <sub>2</sub> O | 0.02    | g  |
| H <sub>3</sub> BO <sub>3</sub>                           | 0.01    | g  |
| Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O    | 0.01    | g  |
| NiCl <sub>2</sub> x 6 H <sub>2</sub> O                   | 0.03    | g  |
| Na <sub>2</sub> SeO <sub>3</sub> x 5 H <sub>2</sub> O    | 0.30    | mg |
| Na <sub>2</sub> WO <sub>4</sub> x 2 H <sub>2</sub> O     | 0.40    | mg |
| Distilled water  | 1000.00 | ml |

First dissolve nitrolotriacetic acid and adjust pH to 6.5 with KOH, then add minerals. Adjust final to pH 7.0 with KOH.

### Fe(III) quinate solution 0.01 M (from medium 380)

|  |         |    |
|--|---------|----|
| FeCl <sub>3</sub> x 6 H <sub>2</sub> O | 4.50    | g  |
| Quinic acid                            | 1.90    | g  |
| Distilled water                        | 1000.00 | ml |

Sterilize by filtration under 100% N<sub>2</sub> gas atmosphere.

### 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 <sub>12</sub>    | 1.00    | mg |
| p-Aminobenzoic acid        | 50.00   | mg |
| (DL)-alpha-Lipoic acid     | 50.00   | mg |
| Distilled water            | 1000.00 | ml |