# 853b: FUSIBACTER BIZERTENSIS MEDIUM

| | | |
|---|---|---|
| $NH_4Cl$ | 1.00 | g |
| $K_2HPO_4$ | 0.30 | g |
| $KH_2PO_4$ | 0.30 | g |
| $MgCl_2$ x 6 $H_2O$ | 0.50 | g |
| $CaCl_2$ x 2 $H_2O$ | 0.10 | g |
| KCl | 0.10 | g |
| NaCl | 3.00 | g |
| Yeast extract (OXOID) | 1.00 | g |
| Trypticase peptone (BD BBL) | 1.00 | g |
| **Modified Wolin's mineral solution** | 10.00 | ml |
| Sodium resazurin (0.1% w/v) | 0.50 | ml |
| $Na_2S_2O_3$ x 5 $H_2O$ | 3.16 | g |
| L-Cysteine HCl x $H_2O$ | 0.50 | g |
| $Na_2CO_3$ | 1.50 | g |
| D-Glucose | 3.60 | g |
| $Na_2S$ x 9 $H_2O$ | 0.30 | g |
| Distilled water | 1000.00 | ml |

Dissolve ingredients, except thiosulfate, cysteine, carbonate, glucose, and sulfide, then sparge medium for 30 - 45 min with 80% $N_2$ and 20% $CO_2$ gas mixture to make it anoxic. Add thiosulfate and cysteine, then adjust pH to 7.0 and dispense medium under 80% $N_2$ and 20% $CO_2$ gas atmosphere into anoxic Hungate-type tubes or serum vials to 30% of their volume and autoclave. After autoclaving, add glucose and sulfide from sterile anoxic stock solutions prepared under 100% $N_2$ gas and carbonate from a sterile anoxic stock solution prepared under 80% $N_2$ and 20% $CO_2$ gas atmosphere. Adjust the pH of the complete medium to 7.2 - 7.4, if necessary.

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

| | | |
|---|---|---|
| Nitrilotriacetic acid | 1.50 | g |
| $MgSO_4$ x 7 $H_2O$ | 3.00 | g |
| $MnSO_4$ x $H_2O$ | 0.50 | g |
| NaCl | 1.00 | g |
| $FeSO_4$ x 7 $H_2O$ | 0.10 | g |
| $CoSO_4$ x 7 $H_2O$ | 0.18 | g |
| $CaCl_2$ x 2 $H_2O$ | 0.10 | g |
| $ZnSO_4$ x 7 $H_2O$ | 0.18 | g |
| $CuSO_4$ x 5 $H_2O$ | 0.01 | g |
| $AlK(SO_4)_2$ x 12 $H_2O$ | 0.02 | g |
| $H_3BO_3$ | 0.01 | g |
| $Na_2MoO_4$ x 2 $H_2O$ | 0.01 | g |

| | | |
|---|---|---|
| $NiCl_2$ x 6 $H_2O$ | 0.03 | g |
| $Na_2SeO_3$ x 5 $H_2O$ | 0.30 | mg |
| $Na_2WO_4$ x 2 $H_2O$ | 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.