

985a. DEFERRIBACTER AUTOTROPHICUS MEDIUM

NaCl	18.00	g
MgCl ₂ x 6 H ₂ O	4.00	g
KCl	0.34	g
NH ₄ Cl	0.25	g
CaCl ₂	0.11	g
K ₂ HPO ₄	0.18	g
Fe(NH ₄) ₂ (SO ₄) ₂ x 7 H ₂ O	20.00	mg
Trace element solution SL-10 (see medium 320)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Yeast extract	0.20	g
Na-resazurin solution (0.1% w/v)	0.50	ml
Na ₂ CO ₃	1.50	g
KNO ₃	1.00	g
Na-acetate	1.60	g
Vitamin solution (see medium 141)	10.00	ml
Na ₂ S x 9 H ₂ O	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients (except carbonate, nitrate, acetate, vitamins and sulfide), then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add vitamins (sterilized by filtration), nitrate, acetate and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas atmosphere. The pH of the complete medium should be 6.5 -7.0.