ATCC medium: 1995 *Thiobacillus caldus* medium

Solution A:
$(NH_4)_2SO_4$.....3.0 g
Na_2SO_4 . $10H_2O$.....3.2 g
KCl.....0.1 g
K_2HPO_4 .....50.0 mg
$MgSO_4$. $7H_2O$ .....0.5 g
Distilled water.....460.0 ml

Adjust solution A to pH 1.75 with H_2SO_4. Autoclave at 121C for 15 minutes. Maintain above 60C (see below).

Solution B:
$Ca(NO_3)_2$. $4H_2O$.....10.0 mg
$FeCl_3$. $6H_2O$ .....11.0 mg
$CuSO_4$. $5H_2O$ .....0.5 mg
H_3BO_3 .....2.0 mg
$MnSO_4$. H_2O .....2.0 mg
Na_2MoO_4 . $2H_2O$.....0.8 mg
$CoCl_2$. $6H_2O$ .....0.6 mg
$ZnSO_4$. $7H_2O$ .....0.9 mg
Distilled water.....10.0 ml

Filter-sterilize solution B.

Solution C:
Glucose.....0.45 g
Distilled water.....10.0 ml

Filter-sterilize solution C.

Solution D:
Sodium tetrathionate.....0.77 g
Distilled water.....20.0 ml

Filter-sterilize solution D.

Solution E:
Phytagel (Sigma P-8169).....15.0 g
Distilled water.....500.0 ml

Autoclave solution E at 121C for 15 minutes. Maintain above 60C (see below).

Maintain solutions A and E above 60C when removed from autoclave to retard rapid gelling of Phytagel. Aseptically combine solutions A through E and dispense into appropriate vessels. Complete medium will have a final pH of 2.5.

For liquid medium, omit solution E and prepare solution A in 960 ml water. Adjust solution A to pH 2.5.

For chemolithotrophic growth, omit glucose.