

**Sulfolobus Media (ala Zillig) for 1 liter**  
(revised April 2007)

1. Dissolve in approx. 800 ml distilled water:
  - a. 3.0 grams Ammonium sulfate:  $(\text{NH}_4)_2\text{SO}_4$
  - b. 0.7 grams Glycine
  - c. 0.5 grams Potassium hydrogen phosphate (potassium phosphate, dibasic):  $\text{K}_2\text{HPO}_4$
  - d. 0.1 grams Potassium chloride:  $\text{KCl}$
  
2. Carbon source:

YS:

  - a. 1.0 gram Yeast extract
  - b. 2.0 grams Sucrose

Tryptone (T):

  - a. 2.0 grams Tryptone
  
3. Trace elements (solutions are on shelf above the scale):
  - a. 1 ml of 1M Magnesium chloride / 0.3 M Calcium nitrate solution (pre-made)
  - b. 200  $\mu\text{l}$  1% Ferrous sulfate:  $\text{FeSO}_4$
  - c. 244  $\mu\text{l}$  1% Sodium borate:  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$
  - d. 90  $\mu\text{l}$  Manganese chloride:  $\text{MnCl}_2 \cdot 4 \text{H}_2\text{O}$
  - e. 11  $\mu\text{l}$  Zinc sulfate:  $\text{ZnSO}_4 \cdot 7 \text{H}_2\text{O}$
  - f. 2.5  $\mu\text{l}$  Cupric sulfate:  $\text{CuSO}_4 \cdot 5 \text{H}_2\text{O}$
  - g. 1.5  $\mu\text{l}$  Sodium molybdate:  $\text{Na}_2\text{MoO}_4 \cdot 2 \text{H}_2\text{O}$
  - h. 1.5  $\mu\text{l}$  Vanadyl sulfate:  $\text{VOSO}_4 \cdot 5 \text{H}_2\text{O}$
  - i. 0.5  $\mu\text{l}$  Cobalt chloride:  $\text{CoCl}_2 \cdot 6 \text{H}_2\text{O}$
  - j. 0.5  $\mu\text{l}$  Nickel sulfate:  $\text{NiSO}_4 \cdot 6 \text{H}_2\text{O}$
  
4. Adjust pH to 3.0 – 3.2 with 50% sulfuric acid (approx. 300  $\mu\text{l}$ )
  
5. Add distilled water to make 1 liter
  
6. Autoclave on liquid/fluid cycle for 20 minutes
  
7. May store at room temperature until opened – refrigerate (4° C) after opening