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## Hydra Medium 4.0

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Works for me

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### ABSTRACT

This is the recipe for the medium that the Steele Lab currently uses for culturing all of its Hydra strains. A detailed description of the medium is in the following document: [Hydra\\_Medium.pdf](#)

### GUIDELINES

Because we are culturing quite a few different strains of Hydra, some in large quantities, we make Hydra Medium up in 100 liter batches. This also avoids the need to make up stock solutions of the reagents. We simply add the solid reagents to 100 liters of water. There is no need to adjust the pH of the medium; the sodium bicarbonate provides buffering to the appropriate pH.

### SAFETY WARNINGS

The components of Hydra Medium are not dangerous.

### BEFORE STARTING

Be sure you have a source of high purity water, such as MilliQ or Nanopure.

#### Fill Tank

- 1 Fill Nalgene tank with 100 liters of high purity water (Nanopure, MilliQ, or equivalent). The volume markings on the side of the tank are accurate enough for determining how much water you have added.

#### Add ingredients

- 2 Add anhydrous magnesium sulfate **3.97 g**  
Mix well with plastic paddle
- 3 Add potassium chloride **0.22 g**  
Mix well with plastic paddle
- 4 Add sodium bicarbonate **4.2 g**  
Mix well with plastic paddle
- 5 Add calcium chloride dihydrate **14.7 g**  
Mix well with plastic paddle



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