

## DEPC-Treatment of Water

### Introduction

Many experimental procedures in biological research require the use of RNase-free water to prevent the degradation of RNA. RNase-free water is generated when distilled water is treated with diethylpyrocarbonate (DEPC), which efficiently inhibits RNases by covalent modification. Here we describe a general procedure to treat water with DEPC.

### Materials

- DEPC ([GoldBio Catalog # D-340](#))
- dH<sub>2</sub>O
- Glass container

### Method

1. Add 100 µl of DEPC to 100 ml dH<sub>2</sub>O for a final concentration of 0.1% DEPC in a glass container.
2. Mix well and let set at room temperature for 1 hour.
3. Autoclave the solution for 15-45 minutes at 15 psi (to degrade DEPC).
4. Allow the solution to cool at room temperature.
5. DEPC-treated water can be stored at room temperature until further use.