

## CCMB80 Buffer

### Materials

- 10 mM potassium acetate (pH 7.0)
- 80 mM  $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$
- 20 mM  $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$
- 10 mM  $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$
- Sterilized de-ion water
- 10 mL sterile syringe
- Sartorius syringe filter holder (0.20  $\mu\text{M}$ )

### Method

1. Dissolve the following buffers in sterilized de-ion water up to 100 mL.

Buffers	Volume
10 mM potassium acetate	1 mL
80 mM $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$	1.18 gram
20 mM $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$	0.4 gram
10 mM $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$	0.2 gram
Sterilized de-ion water	Up to 100 mL

2. Adjust the pH to 6.4 by adding concentrated HCl.
3. Filter sterilize using membrane millipore (0.20  $\mu\text{M}$ ) and store at 4°C.

### Recipe

1 M potassium acetate stock solution (100 mL)

- a. Dissolve 9.8 gram of potassium acetate in 100 mL sterilized de-ion water.
- b. Adjust the pH to 7.0