

SOLUTION PREPARATION FOR FROZEN SAMPLE

Fixative : 4% Buffered Paraformaldehyde

1. 4 g paraformaldehyde powder + 50mL distilled water (at 60°C for 10 minutes)
2. Add NaOH (1-2 drops) warm and stir (at 60°C for 10 minutes)
3. Cool and add 50mL 0.2 M buffer
4. Bring pH 7.3-7.4 (HCl drop at a time)

PBS (Phosphate Buffered Saline)

1. 1M Disodium Hydrogen Phosphate Dehydrate (+0.9% NaCl)

$$\begin{aligned} 1M &= 177.99g/1000mL \\ &= 17.799g/100mL \\ 0.1M &= 17.799g/100mL \times 1/10 \\ &= 1.7799g/1000mL \end{aligned}$$

So for 1L = 17.8g

2. 1M Sodium Dihydrogen phosphor dihydrate (+0.9% NaCl)

$$\begin{aligned} 1M &= 156.01g/1000mL \\ &= 15.6g/100mL \\ 0.1M &= 15.610g/100mL \times 1/10 \\ &= 1.5610g/1000mL \end{aligned}$$

So for 1L = 16.6g

0.9% NaCl

0.9g NaCl + 100mL distilled water

$$\begin{aligned} \text{If } 1000mL &= (0.9g \times 1000mL)/100mL \\ &= 9g \text{ NaCl} \end{aligned}$$

To make PBS: Add a solution 2 into solution 1 (pH7.2). Then add the acidic solution into the basic solution. For 1L solution 1, add 300mL solution 2. Adding the solution 2 little by little until the pH increases to pH7.2-7.4.

