Make all buffers and solutions with distilled water:

1. TE pH 8.0 buffer[1]:

10 mM Tris-HCl pH 8.0

1 mM EDTA-Na pH 8.0

To prepare 100 mL of TE buffer pH 8.0:
Add 10 mL of 100 mM Tris-HCl pH 8.0 and 2 mL of 50 mM EDTA-Na and

Some protocols use TE 10:0.1 with 0.1 mM EDTA to reduce the interaction

2. Tris-Borate-EDTA (TBE) buffer:

	grams for 10X TBE	grams for 5X TBE
89 mM Tris base (FW 121.1)	108 g	54 g
89 mM Boric acid (FW 61.8)	55 g	27.5 g
2 mM EDTA disodium salt (FW 372.2)	7.4 g	3.7 g

Add distilled water to 1 litre.

3. Tris Acetate (TAE) buffer:

For a final concentration :	To prepare 1 litre 50X TAE
40 mM Tris base (FW 121.1)	242 g
20 mM glacial acetic acid (FW 61.8)	57.1 g
1 mM EDTA— make 500mM with 186.1 g EDTA disodium salt (FW 372.2) and correct pH to 8.0	100 mL

Add distilled water to 1 litre.

To make 1X TAE from 50X TAE stock, dilute 20ml of stock into 980 mL of water.

Notes:
[1] Tris has a large temperature co-efficient (-0.028 pH/°C) which means that the pH of a Tris buffer will increase with decreasing temperature. Therefore, it is important to adjust the pH at the same temperature at which the buffer will be used. Tris should not be used as a buffer below pH ~7.2 or above pH ~9.0.