

Reagent and Buffer Recipes

0.5M EDTA (pH 8.0)

186.1 g of EDTA•2H₂O in 800 mL
Adjust pH with NaOH (about 30 g of pellets)
Sterilize by autoclaving
*EDTA will not go into solution until pH near 8
Available from Fisher pre made, cat # E-7889

PBS

8 g NaCl
0.2 g KCl
1.44 g Na₂HPO₄
0.24 g KH₂PO₄
→ Dissolve in 800 mL water
→ Adjust pH to 7.4 with HCl and add water to 1 L
Sterilize by autoclave, store at room temperature

70% Ethanol

73.33 mL 95% EtOH
Bring final volume to 100 mL with DI H₂O

8X TBE

86.4 g Tris
43.2 g Boric Acid
64 mL 0.5M EDTA (pH 8.0)
Dissolve in 800 mL water
Bring final volume to 1L

1x TBE (for electrophoresis): 8L recipe

86.4 g Tris
43.2 g Boric Acid
64 ml 0.5M EDTA (pH 8.0)
Dissolve in 1 L water
Transfer to 8 L carboy and fill to 8L mark

6X Loading Dye

15% Ficoll Type 400
0.25% Bromophenol Blue
0.25% Xylene cyanol FF

To make 15 mL mix 2.25 g Ficoll, 0.04 g Bromophenol Blue and 0.04 g Xylene cyanol FF in deionized water. Store in 1 mL aliquots: Vortex vigorously before EACH use.

1kb ladder (with loading dye)

New England Biolabs Product # N3232S (100 µg, 500 µg 1mL⁻¹ concentration)
100 µL 1kb ladder mixed with 700 µL TE buffer and 200 µL 6x loading dye.
This results in 0.5 µg of ladder per lane when you add about 10 µL of this solution to a well.