

SOC Preparation (1 L) :

- Tryptone - 50 g
- Yeast Extract - 5 g
- NaCl - 0.5 g
- KCl - 10 mL (250 mM solution)
- MgCl_2 - 5 mL (2 M MgCl_2)
- Glucose - 3.603 g (20 mM)
- MilliQ water to make up the volume to 1 L.

Adjust the pH to 7.0 using NaOH.

SOB Preparation (500 mL) :

- NaCl - 0.2922 g (10 mM) (Stock: 5 mL, 1 M)
- Tryptone - 10 g (2%)
- Yeast Extract - 2.5 g (0.5%)
- KCl - 0.0932 g (2.5 mM) (1.25 mL of 1 M stock)
- $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ - 5 mL of 2 M MgCl_2
- $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ - 2.4648 g of 5 mL 1M stock

Adjust the pH to 6.7 - 7.0 by adding NaOH.

TE preparation (1x, 200mL):

- Tris base - 10 mM (0.24 g)
- EDTA - 0.1 mM (0.007 g)

Adjust the pH to 8.0 by adding 1N HCl.

TAE Preparation (50x, 1Lit) :

- Tris-base - 242 g
- EDTA - 100 mL
- Glacial Acetic Acid - 57.1 mL
- Water to make up the volume to 1 L.

Transformation buffer Preparation (100 mL) :

- PIPES - 0.3024 g (10 mM)
- CaCl_2 - 0.2130 g (15 mM)
- KCl - 1.864 g (250 mM)
- $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ - 1.0885 (55 mM, *added after the pH is set to 6.7*)

Adjust the pH to 6.7 using diluted HCl.

Mix by stirring using a magnetic stirrer for 45 mins.

Store it at 4°C and ice chill before using.

LB Media Preparation

- Luria Bertani broth - 20 g
- MilliQ Water - 1 L