Appendix
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**Ampicillin (1000X)**

**Stock Solution** 1.0 g ampicillin was dissolved in 10 mL of autoclaved ddH₂O (100 mg/mL - stock solution). The stock solution was filter sterilized with 0.22 µm filter and was stored at -20°C.

**Working solution:** Stock solution was dilute to 100 µg/mL in LB for bacterial cultures.

**Kanamycin (1000X)**

**Stock Solution** 0.25 g of kanamycin was added in 5 mL of autoclaved ddH₂O to make stock solution of 50 mg/mL. It was then filter sterilized through 0.22 µm filter and was stored at -20°C.

**Working solution:** Stock solution was dilute to 50 µg/mL in LB for bacterial cultures.

**LB (Luria broth) media**

1.0 g Bacto-tryptone
0.5 g yeast extract
1.0 g NaCl

Volume was made upto 100mL with ddH₂O and was autoclaved.

**Agarose gel**

0.5 g of agarose was added in 50 mL of 1X TAE (final concentration of agarose 1% w/v). It was boiled till clear homogenous solution.

Ethidium bromide was added to a final concentration of 0.5 µg/mL before pouring gel.

**50X TAE buffer for agarose gels**

242 g Tris base
20.81 g EDTA
57.1 mL glacial acetic acid
Final volume was made upto 1 L with ddH₂O

**IPTG (isopropyl β-D-1-thiogalactopyranoside)**
1 M stock solution of IPTG was made by adding 5.96 g of IPTG in 25 mL of autoclaved ddH₂O. Filter sterilized stock solution was store at -20°C for further use.

**PMSF (phenylmethlysulfanoxide)**
*Stock Solution*: 0.87 g of PMSF was dissolved in 50mL of isopropanol to make stock solution of 100 mM.
*Working Solution*: 100mM of stock solution was diluted to 1 mM in cell suspension.

**APS (ammonium persulfate)**
1g APS was dissolved in 10 mL of autoclaved ddH₂O (10% w/v final concentration)
It was store at -20°C for further use.

**SDS-PAGE gel making buffer (for Separating gel)**
1.5 M Tris-HCl
118.2 g of Tris-HCl in H₂O, pH 8.8
Final volume was made upto 500 mL with autoclaved ddH₂O

**SDS-PAGE gel making buffer (for Stacking gel)**
1 M Tris-HCl (for stacking gel)
78.8 g of Tris-HCl in H₂O, pH 6.8
Final volume was made upto 500 mL with autoclaved ddH₂O

**SDS-PAGE 10X gel running buffer**
248 mM Tris base (60 g)
1.92 M glycine (288 g)
1% w/v SDS (20 g)
Final volume was made upto 2L with autoclaved ddH₂O
Diluted to 1X for running SDS-PAGE gels
4X SDS-PAGE sample loading buffer
1.5 mL of 1 M Tris-HCl pH 6.8
3 mL of 1 M DTT (dithiothreitol)
0.6 g of SDS (sodium dodecyl sulfate)
0.03 g of bromophenol blue
2.4 mL of glycerol
Final volume was made to 7.5 mL with ddH₂O and was stored at -20°C.

SDS-PAGE Coomassie staining solution
1.25 g Coomassie R-250
225 mL methanol
225 mL H₂O
50 mL glacial acetic acid.

SDS-PAGE destaining solution
300 mL methanol (30%)
100 mL acetic acid (10%)
600 mL H₂O

Western Blot Transfer Buffer
Tris-base 3.0 g
Glycine 14.4 g
Methanol 200 mL
Final volume was made to 1L with autoclaved ddH₂O.

Ponceau Red Staining Solution (1L)
Ponceau S 0.5 g
Acetic acid 25 ml
ddH₂O 475 ml
**10X PBS (1 L)**
1.4 M NaCl (81.8 g)  
270 mM KCl (20.1 g)  
100 mM Na2HPO4 (14.2 g)  
18 mM KH2PO4 (2.45 g)  
 pH was adjusted to 8.0. Final volume was made up to 1L with ddH2O.

**Membrane blocking buffer**  
PBS plus 5% non-fat milk powder

**Western Blot Washing Buffer (TBST Buffer)**  
0.05% Tween-20 in TBS buffer.