

Solutions For Lac Z Staining of Mouse Embryos**15% Sucrose in 1X PBS (500 ml)**

425 ml 1X PBS

75 g Sucrose

- filter

30% Sucrose in 1X PBS (500 ml)

350 ml 1X PBS

150 g Sucrose

- filter

200mM potassium ferrocyanide (5 ml)

(MW = 422.4 g/mol)

0.4224 g potassium ferrocyanide

5 ml ddH₂O

- Store in foil-covered tube @ 4°C

200 mM potassium ferricyanide (5 ml)

(MW = 329.2 g/mol)

0.3292 g potassium ferricyanide

5 ml ddH₂O

Store in foil-covered tube @ 4°C

1M monobasic sodium phosphate (1L)

(MW = 119.98 g/mol)

120 g monobasic sodium phosphate

1 L ddH₂O

- do in glass beaker!

1 M dibasic sodium phosphate (1L)

(MW = 141.96 g/mol)

142 g dibasic sodium phosphate

1 L ddH₂O

- do in glass beaker!

- tends to get very clumpy and hard.**50 mg/ml X-gal in DMF (10 ml)**

0.5 g X-gal powder (Fermentas)

10 ml DMF (under hood)

-Store in foil-covered tube @ -20°C

1% deoxycholate (500 ml)

5 g sodium deoxycholate

500 ml ddH₂O

- filter

LacZ Wash Buffer(1L)2 ml 1M MgCl₂

10 ml 1% deoxycholate

2 ml 10% NP40

22.7 ml 1M monobasic sodium phosphate

X-gal Staining Solution (10 ml)

150 ul 50mg/ml X-gal in DMF

200 ul 200 mM potassium ferrocyanide

200 ul 200 mM potassium ferricyanide

200 ul 1M Tris pH 7.5

76 ml 1M dibasic sodium phosphate

9.25 ml LacZ Wash Buffer

889 ml H₂O

Solutions For Lac Z Staining of Mouse Embryos

4% Paraformaldehyde in 1XPBS (PFA) (500 ml)

- In a 1 L beaker, add 250 ml ddH₂O. Microwave for 1 minute.
- Put beaker of hot water onto stir plate with heat on.
 - heat to ~ 60°C (display: 95-100)
 - Stir speed: ~180
- Slowly add 20 g paraformaldehyde to hot water.
- Add ~100 ul 5N NaOH.
- Keep stirring until solution is mostly clear.
- Take pH with pH strips.
 - 8.0 > solution ≥ 7.0
- Cool. Add 50 ml 10X PBS. Add ddH₂O to 500 ml.
- Filter through 0.2 micron vacuum filter.
- Take pH with pH strip.
 - 8.0 > solution ≥ 7.0
- PFA solution can be stored at 4°C short term or -20°C long term.