

SOLUTIONS

10M Ammonium Acetate (1L)

577.5g Ammonium Acetate
volume to 1L with MQ H₂O
optional: DEPC treat o/n
-autoclave 45'

Ampicillin Stock (50µg/ml)

2.5g Ampicillin
50ml MQ H₂O
-aliquot by 1mL, store at -20°C

10% BMB Stock

50g Powder BMB
500ml of 1X MAB
-autoclave 45'
-aliquot by 10ml, store at -20°C

0.5M EDTA pH 8 (1L)

186.1g disodium ethylenediaminetetra-acetate-2 H₂O (EDTA)
-add about 800ml MQ H₂O
-pH to 8.0 with about 20g of NaOH
-bring volume to 1L with MQ H₂O
optional: DEPC treat overnight
-autoclave 45'

200mM EGTA (500ml)

38.04g EGTA powder
bring to 500ml with MQ H₂O
-add NaOH slowly to go into solution. Keep pH between 7 and 8
-autoclave 45'

Hybridization Buffer for in-situs (1L)

500ml Formamide
250ml 20X SSC (DEPC treated)
1g Torula RNA (or 20ml of 50mg/ml Torula in DEPC H₂O)
100mg Heparin
10ml 100X Denharts
10ml 10% Tween-20
1g CHAPS
50ml .5M EDTA (DEPC treated)
bring volume to 1L with DEPC water

5X MAB (1L)

58.4g Maleic Acid

43.5g NaCl

-pH to 7.5 by adding about 39g NaOH and drops of 10N NaOH (cloudiness clears at around pH6.0)

-autoclave 45'

1X MAB (1L)

11.61g Maleic Acid (100mM)

8.77g NaCl (150mM)

-pH to 7.5 with about 7.8g NaOH & drops of 10N NaOH

-sterile filter

1M MgSO₄ (500ml)

add to 300ml MQ H₂O

123.25g MgSO₄

-bring volume to 500ml

-autoclave 45'

1M MOPS (1L)

209.3g MOPS directly into ~700ml of DEPC H₂O

~20g NaOH

-pH with paper strips or by removing aliquots until pH = 7.4

-sterile filter

5M NaCl (1L)

292.2g NaCl

~700ml MQ H₂O, final volume of 1L

optional: DEPC treat o/n

-autoclave 45'

3M NaOAc pH 4,8 (1L)

408.1g NaOAc

~200ml MQ H₂O

-pH with glacial acetic acid to correct pH

-bring volume up to 1L with MQ H₂O

optional: DEPC treat o/n

-autoclave 45'

10X OrangeG Loading Buffer (10ml)

.025g OrangeG Solid

5ml Glycerol

5ml MQ H₂O

-mix and aliquot in 1ml aliquots

20X PBS (1L)

160g NaCl

4g KCl

28.8g Na₂HPO₄ (MW 142.0)

4.8g KH₂PO₄

-pH to 7.4 with HCl

-bring up to 1L with MQ H₂O

-autoclave for 45'

Note: In MNL-K 20X PBS, pH 6.3 results in 1X PBS at pH 7.4-7.5

20X PBS (1L) Alternate Method

4g KCl

28.8g Na₂HPO₄ (MW 142.0)

4.8g KH₂PO₄

-pH to 7.4 with HCl

then add 160g NaCl

bring to 1L with MQ H₂O

20X SSC (1L)

to about 700ml MQ H₂O add

175.3g NaCl

88.2g NaCitrate

-adjust pH to 7.0 with HCl

-bring volume to 1L with MQ H₂O

-autoclave 45'

50X TAE (4L)

968g Tris base

228.4ml Glacial Acetic Acid

400ml 0.5M EDTA pH8

bring to 4L with MQ H₂O

10X TBE (1L)

108g Tris Base

55g Boric Acid

40mL 0.5M EDTA pH8.0

-up to 1L with MQ H₂O

Transfer Buffer w/o SDS (2L)

5.8g Tris

29g Glycine

400ml MeOH

bring to 2L with MQ H₂O

1M Tris pH7.5 (500ml)

to ~400ml of MQ H₂O add

60.55g Tris Base

-pH to 7.5 with HCl

-autoclave 45'