







Appendix B

Prepared Buffers and Solutions



DNA Unit
DNA Database Unit





0.5M EDTA

I. Required Items:

EDTA	186.1 g	93 g	18.6 g
dH ₂ O	800 ml	400 ml	80 ml
NaOH Pellets			
Total volume	1 L	500 ml	100ml

II. Instructions For Preparation:

Add EDTA to dH₂O. Add NaOH pellets to get EDTA into solution. Adjust volume to 1L. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer indicate that the calibration check was done. Adjust pH to 8.0 with NaOH pellets. Filter sterilize.

III. Storage Conditions:

Refrigerate at 4°C.

IV. Expiration Date:

6 months

[illegible]

STR Citrate Buffer
(.1M Sodium Citrate, pH 5.0)

I. Required Items:

Trisodium citrate, dihydrate ($\text{Na}_3\text{C}_6\text{H}_5\text{O}_7 \cdot 2\text{H}_2\text{O}$)	18.4g
dH ₂ O	800 ml
Citric acid monohydrate	~6 g
 Total volume	 1 Liter

II. Instructions For Preparation:

Add Trisodium citrate to water. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer indicate that the calibration check was done. pH to 5.0 with approximately 6 g of citric acid monohydrate. Adjust volume to 1 Liter.

III. Storage Conditions:

Room Temperature

IV. Expiration Date:

Expires 3 months after preparation.

Lot# Trisodium Citrate	Lot# Citric Acid monohydrate	Amt. Made	Date Prepared	Analyst	Expiration Date

[illegible]

STR Proteinase K

I. Required Items:

Proteinase K	100 mg
sterile dH ₂ O	10 ml

Total volume 10 ml

II. Instructions For Preparation:

Add Proteinase K to water and mix well. Aliquot 100 μ l into sterile .5 ml tubes.

III. Storage Conditions:

Freeze at -20 °C. **DO NOT RE-FREEZE ALIQUOTS.**

IV. Expiration Date:

Expires 12 months after preparation.

Vendor/Lot # Proteinase K	Amt. Made	Date Prepared	Analyst	Expiration Date

STR Spotting Solution

(.4N NaOH, 25 mM EDTA, .00008% Bromothymol Blue)

I. Required Items:

5N NaOH	6ml	12 ml
.5M EDTA	3.75 ml	7.5 ml
Bromothymol blue	150 µl	300 µl
dH ₂ O	65 ml	
Total volume	75 ml	150 ml

II. Instructions For Preparation:

Add ingredients and mix thoroughly.

III. Storage Conditions:

Room Temperature

IV. Expiration Date:

Expires 3 months after preparation.

Prep Date NaOH	Prep Date EDTA	Amt. Made	Date Prepared	Analyst	Expiration Date

STR 20X SSPE

(3.6M NaCl, 200 mM Sodium Phosphate, 20 mM EDTA, pH7.4)

I. Required Items:

Disodium EDTA	7.4 g	14.8 g
NaCl	210 g	420 g
Sodium Phosphate, monobasic	27.6 g	55.2 g
10 N NaOH	~10 ml	~20 ml
dH ₂ O	800 ml	1100 ml
Total volume	1 L	2 L

II. Instructions For Preparation:

Add EDTA to 800 ml DH₂O. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer

II. Instructions For Preparation:

Add Tris HCl and EDTA to dH₂O. Autoclave.

III. Storage Conditions:

Room Temperature

IV. Expiration Date:

Expires 3 months after preparation.

[illegible]

(pH 8.0)

NaCl	.584g	1.17 g
1M Tris-HCl	1 ml	2 ml
.5M EDTA	200 μ l	400 μ l
dH ₂ O	~70 ml	~140 ml
Total volume	100 ml	200 ml

Add NaCl, EDTA, and Tris-HCl to dH₂O and stir until dissolved. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer indicate that the calibration check was done. Adjust to pH 8.0 with 1.0 N HCl. Bring to final volume with dH₂O. Autoclave.

Room Temperature

Expires 3 months after preparation.

[illegible]

[illegible]

1 M Tris-HCL

I. Required Items

Tris base	121.2 g
d H ₂ O	800 ml
conc. HCl	

Final Volume	1000 ml
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II. Instructions for Preparation

Add Tris and dH₂O. Calibrate pH meter with pH 7.0 standard buffer. Analyst initials preparing the buffer indicate that the calibration check was done. Adjust pH to 8.0 (\pm 0.2) by adding ~45 ml of conc. HCl. Bring to final volume with dH₂O. Autoclave.

III. Storage Conditions:

Room temperature

IV. Expiration Date:

Expires 3 months after preparation.

[illegible]

[illegible]