

PROTOCOLS FOR FORENSIC MITOCHONDRIAL DNA ANALYSIS

Preparation of Phase Lock Gel (PLG) tubes		
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Preparation of Phase Lock Gel (PLG) tubes

****NOTE: Make sure the plasticware being used is resistant to phenol and chloroform.**

1 Procedure

- 1.1 Without putting pressure on the plunger, twist off the **orange cap** and discard. Attach the **gray dispensing tip** (supplied) to the syringe and tighten securely. (NOTE: Use of gray tip is optional for a smoother application of PLG. Less force is necessary when gray tip is NOT used.)
- 1.2 Apply firm pressure on the plunger to dispense PLG until it reaches the end of gray tip. Add heavy PLG based on Table below. NOTE: 325 μ L = 3.25 cc corresponds to 3 lines on the syringe

Tube size	PLG heavy	Tube size	PLG heavy
0.5mL	100 μ L	15mL	3mL
1.5mL	325 μ L	50mL	5mL
2.0mL	325 μ L		

- 1.3 Pellet the PLG by spinning the tubes prior to use. See table below.

Tube size	Centrifuge model	Speed	Time
0.5 to 2.0mL	Eppendorf 5415C Eppendorf 5415D	14 x 1000 RPM 13.2 x 1000RPM/16.1 x 1000RCF	30s
15 and 50mL	Sigma 4-15 C	1500 RCF	2m