

## **Slava Epstein DNA Extraction from sand**

### **DNA Extraction Method for #1, 2**

Put the sample into a 10-15 ml vial  
Add 200 ul of 5% Chelex (Walsh et al, 1991) (Sigma)  
Add 4 ul of 10mg/ml Proteinase K (Qiagen)  
Add 14 ul of 1M Dithiothreitol (Biorad)  
Mix gently  
Incubate at 56oC for 1hr.  
Vortex at high speed for 10 sec  
Centrifuge (15,000xg, 30sec)  
Take 30 ul of supernatant

### **DNA Extraction and purification Method for #3, 4, 5, 6, 7, 8**

Repeat all the steps from above  
Add 8 ml of 5% Chelex to the vial after taking 30ul of supernatant  
Add 20ul of 10mg/ml Proteinase K  
Add 70 ul of 1M Dithiothreitol  
Mix gently  
Incubate at 56oC for 1hr.  
Vortex at high speed for 10 sec  
Centrifuge (15,000xg, 30sec)  
Took 7 ml of supernatant and put into a new vial  
Add 0.7 ml of 3M sodium acetate and 21ml of ethanol  
Leave on ice for 30min  
Centrifuge (10,000xg, 10min)  
Wash with 70% Ethanol  
Centrifuge (15,000xg, 10min)  
Air drv and resuspend in water

## **Reference**

P.S. Walsh, D.A. Metzger, R. Higuchio, Chelex 100 as a medium for simple extraction of DNA for PCR-based typing from forensic material, Biotechniques 10 (1991) 506–513.