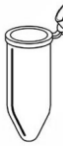
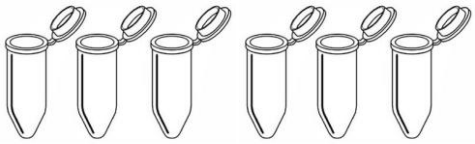
Quick Guide for Forensic DNA Fingerprinting Kit
BioRad Student Manual
Bulletin 3050 Catalogue # 166-0007EDU

revised 2010



I. Preparing the DNA Samples



1. Place the tube containing the restriction enzyme mix, labeled ENZ, on ice.

2. Number each microtubes 1 – 6 follows: Place the tubes in the microfuge tube rack.

3. Indicate which DNA sample you plan to pipette into each tube in the table below.

1	
2	
3	
4	
5	
6	

4. Pipet 10 µl of each DNA sample from the stock tubes and transfer to the corresponding microtubes. Use a separate tip for each DNA sample. Make sure the sample is transferred to the bottom of the tubes.

5. Pipet 10 µl of enzyme mix (ENZ) into the bottom of each tube. Use a separate tip for each ENZ sample.

6. Cap the tubes tightly (!) and mix the components by flicking the tubes. Pulse spin to collect liquid in bottom of tube.

7. Incubate 45 min at 37 °C

8. After the incubation period, remove the tubes from the water bath and add 5 ul loading dye. Store at -20^{o}C

II. Gel Electrophoresis

1. Prepare 50 ml of an 0.8% agarose gel in 1XTBE. The instructor may add DNA stain at this point. Let solidify.

2. Remove digested DNA samples from the freezer. Pulse spin to bring all of liquid into bottom of tube.

3. Place gel in the electrophoresis apparatus. Fill the electrophoresis chamber with 1x buffer to cover the gel. Check that the wells of the agarose gels are near the black (-) electrode and the base of the gel is near the red (+) electrode.

4. Using a separate tip for each sample, load 20 µl volume of each sample. Use 10 µl of the DNA size marker in an additional gel lane. Record the order of samples on the gel.

5. Place lid on the electrophoresis chamber. Plug electrodes into power supply. Turn on power and electrophorese 100 V.

6. Visualize DNA under UV light. Record results