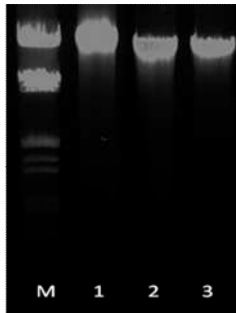


## Isolation of genomic DNA from whole blood *in 15 minutes*

### Description

This kit is specially designed for fast isolation of pure genomic DNA from small volume of whole blood and cultured animal cells. The kit does not use toxic organic solvent, such as phenol and chloroform, making the process more environmental friendly. The whole procedure takes only 15 minutes and the isolated genomic DNA is good for many downstream manipulations, such as PCR amplification, sequencing, etc.



**Electrophoresis of genomic DNA extracted from whole blood**

M:  $\lambda$  DNA/HindIII/EcoRI digests

1, 2 and 3: three independent isolations

### Protocol

#### 1. Cell lysis

a) blood or suspension cells To a 1.5ml microtube, add 10ul whole blood, or 10-20ul cell suspension containing  $1 \times 10^5$ - $5 \times 10^5$  cells, then add 400ul lysis solution BD-L. Go to Step 2.

b) adhesive cultured cells To the cells in 3.5cm dish, remove medium and add 0.6ml lysis solution BD-L. Transfer 0.4ml cell lysate to a 1.5ml microtube. Go to step 2.

2. **Denature chromosome** Rotating the tube for **5 minutes** on a rotator to mix the content thoroughly which assists to denature protein and release genomic DNA from chromosome (if rotator is not available, manually inverting the tube from time to time also works).

3. **Condition adjust** Add 400ul 70% ethanol, mix well by inverting tube for 15 times or mix by rotation for **1 minute**.

4. **Cleaning/Binding** Transfer the mixture to a cleaning/binding combo column (**patent pending**) that has been placed in a collection tube, spin for **2 minutes** at full speed, discard the cleaning column and the flow through. Then put the binding column back to the collection tube;

5. **Wash1** Add 600ul wash solution 1 (BD-W1), spin at full speed for **30 seconds**, discard the flow through and place the column back to the collection tube;

6. **Wash2** Add 600ul wash solution 2 (BD-W2), spin at full speed for **30 seconds**, discard the flow through and place the column back to the collection tube. Spin for another **2 minutes** at full speed to get rid of any trace amount of wash solution, discard the collection tube;

7. **Elution** Add 100ul elution buffer direct to the membrane at the bottom of the column and incubate on bench for **2 minutes**, and then spin for **1 minute** at full speed to elute DNA.

Genetel Whole Blood DNA mini Isolation Kit			
Size	50 (preps)	100 (preps)	200 (preps)
List Price (US\$)	60	110	180