

## DNA Fingerprinting Techniques

### GeNei™ DNA Fingerprinting Teaching Kit (using RFLP Technique)

**Description:** DNA Fingerprinting is a well known technique for establishing authenticity. Apart from its forensic applications, it has also evolved as a simple, yet elegant technique in solving paternity disputes, confirming quality parameters in plant biotech industries, characterizing microorganisms and other applications in medical sciences.

Restriction fragment length polymorphism (RFLP) is an extremely sensitive technique for DNA fingerprinting to establish variations within samples based on up to a single base difference. In this procedure, restriction enzymes are used to cleave seemingly identical DNA samples. As a consequence of allelic differences arising out of mutations during evolution, DNA fragments of different sizes (DNA fingerprints) are produced.

The kit is designed to find out which one of the bacterial isolates has acquired a multiple drug resistant (MDR) plasmid. Plasmids isolated from five individual isolates (one control and four test samples) are supplied. Following restriction digestion and resolution of fragments on agarose gel, the students are asked to identify which one of the isolates has acquired MDR plasmid.

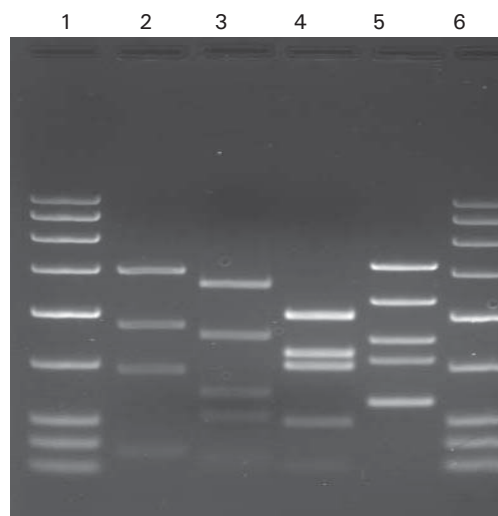
The kit provides enough material to carryout 5/25 experiments.

**Ordering Information:**

Product	Size	Cat #
<b>GeNei™</b> DNA Fingerprinting Teaching Kit (Using RFLP technique) (Consumables for 5 Experiments & Elpho Kit (Cat # 107070))	1 Pack	106337
<b>GeNei™</b> DNA Fingerprinting Teaching Kit (Using RFLP technique) (Consumables for 5 Experiments)	1 Pack	106338
<b>GeNei™</b> DNA Fingerprinting Teaching Kit (Using RFLP technique) (Consumables for 25 Experiments)	1 Pack	106339

**Materials Provided:**

- Test Plasmid DNA (4 nos.)
- Control Plasmid DNA (1 no.)
- DNA Marker
- Restriction Enzyme
- Assay Buffer for Restriction Enzyme
- Agarose
- 50X TAE
- Gel Loading Buffer
- Instruction Manual



DNA Fingerprint from Test plasmid DNA samples:

Lanes 2-5 : Test Plasmid DNA digested with restriction enzymes  
Lanes 1 & 6 : DNA Marker

**Note:** UV transilluminator and EtBr are required.

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