

GeNei™ AFLP Teaching Kit

Description:

A novel DNA fingerprinting technique called Amplified Fragment Length Polymorphism is based on the selective PCR amplification of restriction fragments from a total digest of genomic DNA. The technique involves three steps: (i) restriction of the DNA and ligation of oligonucleotide adapters, (ii) selective amplification of sets of restriction fragments, and (iii) gel analysis of the amplified fragments. PCR amplification of restriction fragments is achieved by using the adapter and restriction site sequence as target sites for primer annealing. The selective amplification is achieved by the use of primers that extend into the restriction fragments, amplifying only those fragments in which the primer extensions match the nucleotides flanking the restriction sites. Using this method, sets of restriction fragments may be visualized by PCR without knowledge of nucleotide sequence. The method allows the specific co-amplification of high numbers of restriction fragments.

The AFLP Teaching Kit enables the user to digest total cellular DNA with one or more restriction enzymes, selectively amplify some of these fragments with two PCR primers that have corresponding adaptor and restriction site specific sequences and can visualise the banding pattern after electrophoretic separation.

The kit provides materials sufficient for 5 experiments.

Ordering Information:

Product	Size	Cat #
GeNei™ AFLP Teaching Kit (Consumables for 5 experiments)	1 Pack	116643

Materials Provided:

- Taq DNA polymerase
- 10X Assay Buffer for Taq DNA Polymerase
- dNTP's Mix
- Template DNA
- Restriction Enzyme 1
- Restriction Enzyme 2
- Adapter Set #1
- Adapter Set # 2
- Primer Set #1
- Primer Set #2
- Nuclease free water
- Mineral oil
- PCR Tubes
- 30% Acrylamide
- 10 X Native PAGE Buffer
- Sample Loading Buffer
- Ammonium per sulphate (APS)
- TEMED
- 20bp DNA Ladder
- Instruction manual

Note: UV transilluminator, thermal cycler, Electrophoresis system, (107079) and EtBr are required.