

## Genetic Analyzer

We have a 3130xl Genetic Analyzer from Applied Biosystems. This instrument is fluorescence based genetic analyzing system where the genotyping methods are based on the sizing of fluorescently labeled DNA fragments.

The applied biosystems 3130xl is capable of performing sequencing and fragment analysis of applications like microsatellite or short Tandem Repeats (STR), AFLP, LOH, SNP, rapid sequencing, standard sequencing de novo sequencing and resequencing.

The sequencer is typically set up for rapid sequencing and fragment analysis but upon request, we can install 50cm array for standard sequencing ( $\leq$ 900bp) but this can typically give a read of  $\leq$ 1200bp.

Available data software sequencing analysis Software v5.2, CodonCode Aligner and Genemapper v4.0 for Fragment Analysis. The system uses POP7 as well as POP6 but mostly POP7 as its separation matrix.

With an instrument protocol which gives a shorter read length and allows for maximum throughput, the 16 capillary array of the 3130xl genetic analyzer can run up to 384 samples in 24hours.

We welcome users that are interested in running Sequencing and Fragment Analysis. Examples of Sequencing Analysis Runs we have done:



Cucumber Mosaic Virus



PCR Product of Maize

Examples of Fragment Analysis Runs we have done:



Two SSRs:Four individuals

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