

High Throughput DNA Sequencing Platform

The Teagasc 454 Sequencing Platform, available through resources based at Teagasc Food Research Centre, Moorepark can bring the power of the GS FLX Titanium series to your DNA sequencing projects. This technology can be employed for whole genome de novo sequencing, transcriptome profiling, metagenomic characterisation of environmental samples, amplicon sequencing and more.

Background

DNA sequencing technologies have been revolutionised in recent years. The Roche 454 GS FLX Titanium series instrument is noteworthy by virtue of the fact that it generates up to 1 million reads, >400 base pair read length, in a run.

This 454 sequencing platform has a range of applications

- Whole genome sequencing.
- Targeted resequencing.
- Metagenomics.
- Transcriptome sequencing.

Competitive Advantage to Clients

- Long read lengths.
- Dedicated Roche software to facilitate initial analysis.
- Option of multiplexing multiple samples.
- Paired-end sequencing options available.
- Competitive prices.

Service Details

Prices available on request.

Concentrations of DNA required as follows:

- Amplicon Library > 5 ng/ul Amplicon
Genome: 10mg double stranded DNA, minimum concentration 50ng/ml in TE buffer. OD260/280 \geq 1.8.
- Paired End Genome: 30mg double stranded DNA, minimum concentration 200ng/ml in Tris-CL buffer, pH 7.5-8.5 or molecular grade water. OD260/280 \geq 1.8.

Of Interest to

For any institutes or bodies engaged in sequencing projects interested in accessing facilities providing improved sample throughput. There are also numerous potential industry-related applications such as assessing the impact of specific foods and ingredients on the gut microbiota and gut health, sequencing of probiotic strains, investigating animal genetics and many more.



How to Proceed

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