

Genetic Sequencer

Description

Illumina NextSeq 500 ([More details](#))

Location

Rm510B, Biotech Centre 1

Features

- Desktop next-generation sequencing (NGS) system capable of sequencing a whole human genome at high coverage (30x) in one run and delivers one-day turnaround for a number of popular sequencing applications.
- Leverage the latest evolution of Illumina's sequencing by synthesis (SBS) technology, two-channel SBS, enabling a breakthrough reduction in data generation times ([More details](#))
- Exceptionally high quality score distributions: >75% of bases with Q scores >30 (2 x 150 bp)

Flexibility and Scalability

- Two flow cell configurations (High and Mid) offers tunable read lengths and output options
- Easily shift from low to higher throughput processing with each sequencing run
- Read-length is fully adjustable up to 2 x 150 bp

| Flow cell configuration | Expected output using 2x150 bp with dual-surface scanning |
|-------------------------|---|
| High Output | Up to 120 Gb (Up to 400M single reads / 800M paired-end read) |
| Mid Output | Up to 39 Gb (Up to 130M single reads / 260 paired-end read) |

Easy and simple integrated workflow

- Does not require emulsion PCR
- No need for dedicated ancillary amplification system
- Single instrument performs clonal amplification, sequencing, paired-end turn
- Alignment, variant calling and reporting are supported in **BaseSpace Onsite** ([More details](#))

Short hands-on and sequencing time

- 10 minutes hands-on time for run setup (amplification, paired-end sequencing)
- As fast as 12-hour sequencing time including cluster generation, sequencing run and base calling with quality scores

Applications

- Whole-genome sequencing
- Targeted resequencing
- Exome sequencing
- Transcriptome sequencing

Contact

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