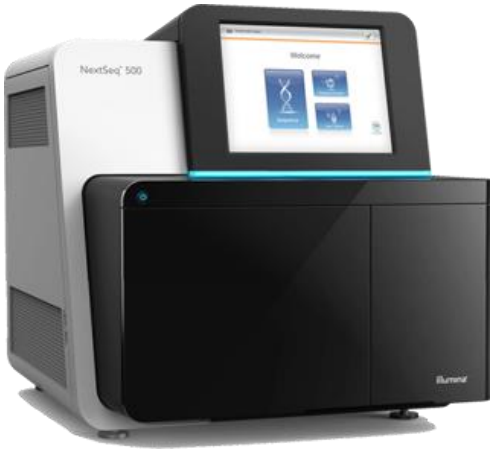
Identify your genomic targets with Next Generation Sequencing at Firalis

The Illumina **NextSeq 500** is the desktop NGS system optimized for speed and long reads. The Flow Cells produce up to 400 million reads with read lengths between up to 150 bp by either single (SR) or paired end (PE) reads to generate up to 120 Gb of data per day. Multiple samples can be multiplexed onto a single cartridge to more efficiently distribute the reads.



Due to its deep sequencing capabilities, the **NextSeq 500** instrument enables a wide variety of applications:

- **Whole genome sequencing**
- **Exome analysis**
- **Transcriptome analysis**
- **Targeted sequencing**
- **Amplicon sequencing**

This unique technology coupled to our **HTG EdgeSeq** system successfully performs **identification of new transcripts, such as miRNA** and lncRNA or characterization of rare variants as a wide number of reads can be done in order to confirm the discovery. The **HTG EdgeSeq** system uses an extraction-free chemistry (without extraction) that significantly reduce sample input requirements and variability associated to the extraction step. In just 3 days, our scientists can go from raw samples to data for up to 96 samples with a very high reproducibility (*R^2> 0.97).

Key strengths of our NextSeq 500 platform:

- Adaptive to your project with Mid Output Flowcell (up to 130 million single reads or 260 million PE reads) or High Output Flowcell (up to 400 million single reads or 800 million PE reads)
- Read lengths up to 2x150 bp resulting in up to 120 data per run
- High multiplexing capabilities with up to 96 samples in a single run
- RNA-Sequencing of mRNA and lncRNA (via polyA selection)
- Whole Transcriptome Assay: mRNA, lncRNA and nuclear RNA (via rRNA depletion)
- Sequencing of small RNA/miRNA

Our **NextSeq 500** system is associated with a BaseSpace server on site for a s**ecure, safe and local environment** avoiding data transfer to the cloud. All data are kept on-site which enables us to store, analyze, and share sequencing data. The data analysis are performed with the different Basespace apps and Partek Genomic Suite.

Our activities are performed in a robust quality environment, accredited ISO 17025 for testing activities where we particularly follow the GCLPs guidelines regarding clinical samples handling. Our platforms and biobanking facilities on-site are regulated through a LIMS system to reach an optimal sample traceability for each project we perform.

Firalis experts helps you for successful experiment design to discover new variant markers and to assess gene expression and regulation, speeding up your clinical development. The NGS platform at Firalis enables also to monitor your promising therapies and to analyze pathology profiling *e.g cancers, inflammatory disorders and neurodegenerative diseases*.

Whether seeking a cutting edge technology, expert hand to your research or taking your business to the next level, you will find on our website a complete description of the services we provide in order to support your organization enhancing your research and clinical trials: http://www.firalis.com/.

Don’t hesitate to contact us at sales@firalis.com to get further details about Firalis Biomarker Services and to discuss your projects.

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