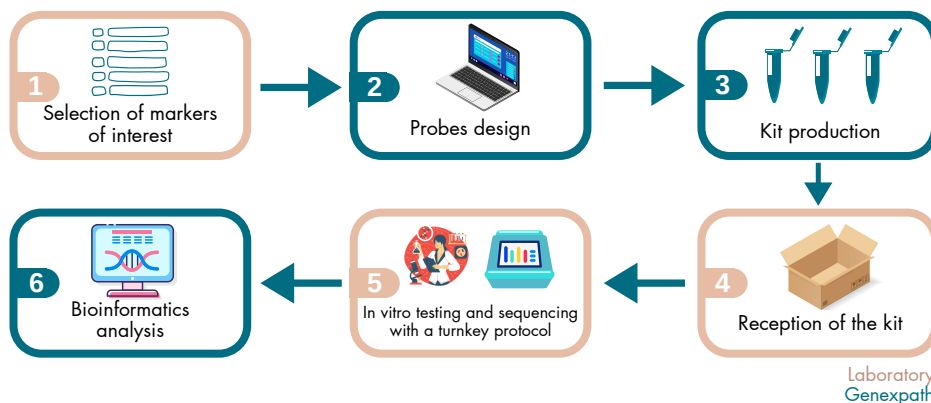


Custom panel

Your turnkey gene expression signature

Genexpath's **Custom Panel** service allows you to evaluate the mRNA expression level of **10 to 100 markers of interest** that **you choose** regardless of the organism studied.

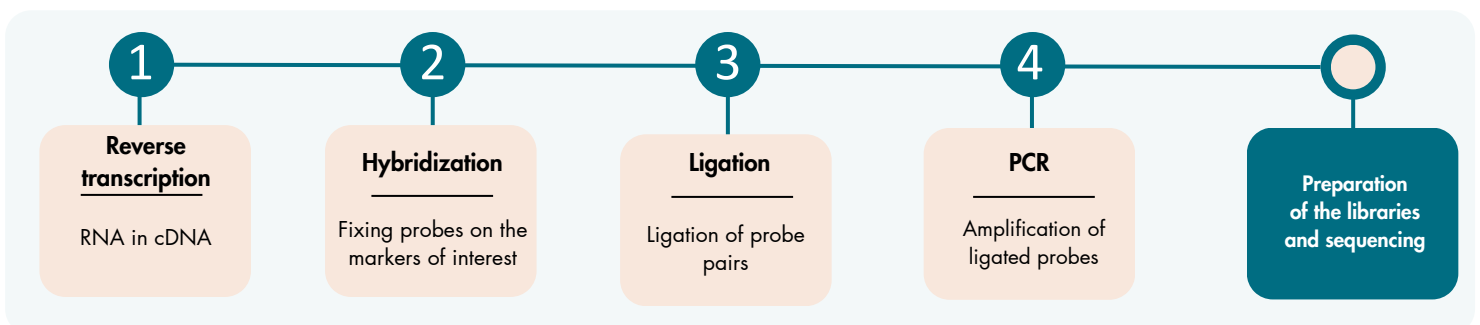
The data is generated by a **high-throughput sequencer** and analyzed using our **RT-MIS** platform.



RT-MLPSeq - a simple and fast technique

The **Custom panel** service uses a semi-quantitative method: **RT-MLPSeq**.

The multi-step *in vitro* test simultaneously evaluates **genetic markers** (genes, mutations, chromosomal translocations, etc.) using pairs of specific oligo-nucleotide probes for each of them.

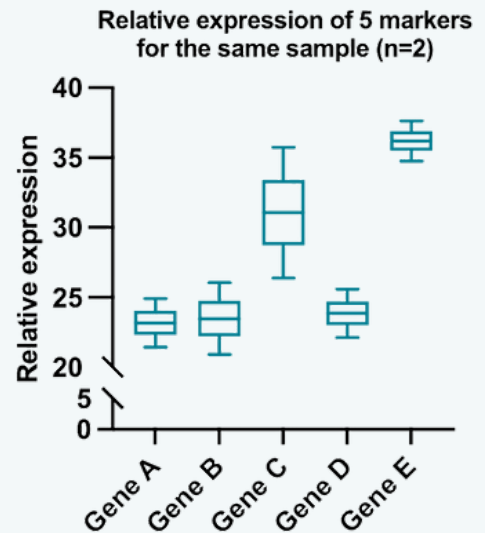


This *in vitro* test is associated to high-throughput sequencing that allows multiple samples and dozens of genes to be tested at the same time.

Post sequencing analysis using dedicted software

After sequencing, the **FASTQ** file is loaded onto the **RT-MIS** platform which performs demultiplexing, precise identification of gene expression markers and their quantification.

RT-MIS delivers in a few minutes a **file** including the **raw data** and the **relative expression** of each marker.



Characteristics

- A custom service
- 1/2 day of manipulation
- Low RNA quantity needed
- Sensitive thanks to short probes
- Increased specificity thanks to UMI
- Sequencing with other libraries possible
- 100 000 reads are sufficient
- Bioinformatic analysis included
- Access to complete raw data

Application domain	Gene expression		
Handling duration	≈4h	Actual working time	≈ 1h-1h30
Type of samples	Fresh, frozen or fixed and paraffin-embedded tissue biopsies		
Input quantity	Between 50 and 500ng of RNA in a volume of 2µL		
Contents of the reagent kit	Probes targeting 10 to 100 markers of interest, barcodes, sequence primer		
Material compatibility	Sequencer Illumina®		

RUO For research use only