

Real-Time PCR

The polymerase chain reaction (PCR) has become one of the most important tools in molecular diagnosis, providing exquisite sensitivity and specificity for detection of nucleic acid targets.

Quantitative real-time PCR (qPCR) is rapidly become a standard practice, which provides a sensitive and reproducible measurement of relative gene expression by comparing one or more genes of interest to a known internal control for normalization.

Acobiom provides gene expression analysis services including quantitative expression analysis (qPCR) for focused transcript sets and adapts a PCR platform to the needs of its partners and clients, according to speed data acquisition and experimental flexibility and statistical treatments (see <u>Bioinformatics</u>).

Real-Time PCR Services

Low throughput PCR with LighCycler LC480 - Roche Diagnostics.

The platform is associated with Echo 525 liquid handler (Labcyte). The LC480 gives a broad range of applications in research fields such as gene expression studies, pathogen detection, SNP genotyping or HRM assays, presence/absence assays, etc. The platform provides an extreme flexibility for experimental PCR design. The number of PCR reactions is about 1,000 per day.

• High throughput PCR with Biomark - Fluidigm.

The platform is a new integrated fluidic circuit without any pre-spotting. The 96.96 Dynamic Arrays (96 samples x 96 PCR primers/probes) are at the heart of the system, which allows gene expression and genotyping studies; able to explore a single cell. The platform provides an extreme speed data acquisition for PCR experiments well designed. The number of PCR reactions is about 30,000 per day.