



qPCR Symposium USA

10 – 13 November 2008, Millbrae, CA

qPCR, also known as Real-time PCR is a modification of standard Polymerase Chain Reaction, which is often compared to the photocopying of nucleic acid (DNA or RNA). The process involves the alternate heating and cooling of a small sample containing a segment of nucleic acid molecules dozens of times over several hours. Throughout this process, copies of these DNA molecules are "amplified" or exponentially increased so that the nucleic acid can be more readily analyzed. The method is called "real-time PCR" because the amplified DNA can be detected during the PCR process, in real time, rather than at the end of the process. This ensures more accurate and precise quantification of nucleic acid. The real-time PCR reaction proceeds automatically with no user intervention, providing increased productivity and reduced opportunity for human error, resulting consistent and reproducible results.

The application of real-time PCR is vast in life science industry, healthcare, diagnostics, Forensics, Food, air and water safety, Point of care in physician offices, clinics and local labs and in bio-defense. The same has extensive usage in research on Biomarkers, Stem Cells, Single Cell, siRNA, miRNA, Diagnostics, Immunology and Expression Profiling.