**Design and Methods**

The system was composed of three different methodologies: direct sequencing (3730 DNA Analyzer, Applied Biosystems 3730), Melting Curve Analysis (a Thermal Cycler 6000 (Corbett Life Science), was the same for the two systems as described in table 2), and High Resolution Melting (HRM), as shown in figure 2.

**Introduction**

The molecular diagnostic work can be divided into two major sections: clinical and forensic analyses. The latter can be divided into two major sections: the DNA extraction and the detection phase. The former is the one that is of interest for the determination of the target DNA. The detection of the target DNA is achieved by amplification of the DNA sequence using a molecular technique, such as polymerase chain reaction (PCR) or other related techniques. The amplification of the target DNA is followed by the analysis of the amplified DNA sequence using a variety of methods, such as DNA sequencing, DNA hybridization, or DNA gel electrophoresis. The amplified DNA sequence is then subjected to analy-