

**334**  
EDVO-Kit #

## PCR-based VNTR Human DNA Typing

**Storage:**

See page 2 for specific instructions.

**Experiment Objective:**

The objective of this experiment is to determine the DNA profile of a sample by using PCR-based VNTR analysis.

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# BACKGROUND INFORMATION

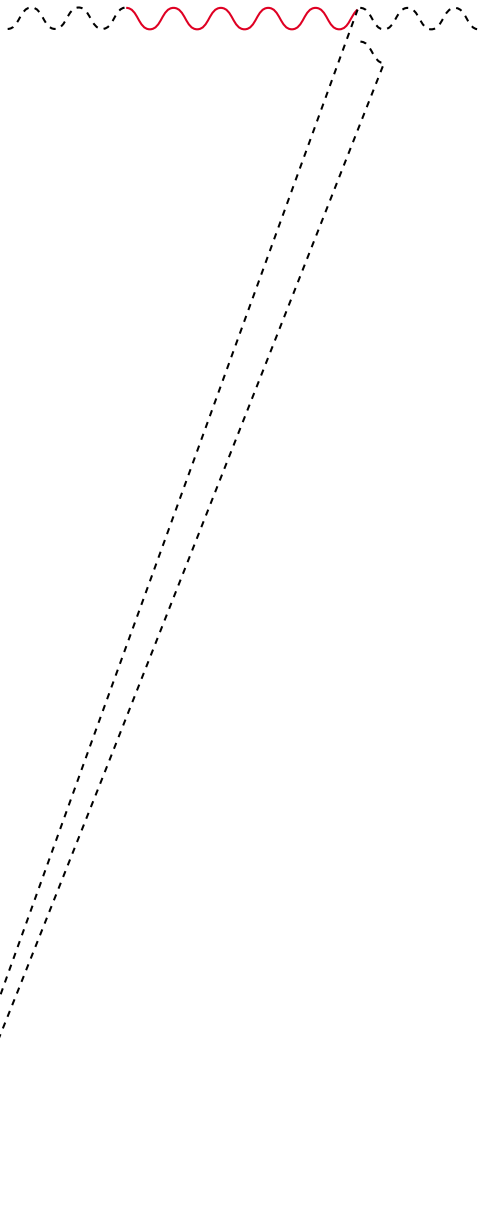
## Background Information

PCR is a technique used to amplify a specific DNA sequence. It involves repeated cycles of heating and cooling to separate DNA strands and synthesize new strands. The process is highly specific and efficient, allowing for the detection of small amounts of DNA. In this kit, PCR is used to amplify a specific VNTR region of human DNA, which is then analyzed using RFLP to determine the genotype.

The amplified DNA is then digested with a restriction enzyme (RFLP). The resulting fragments are separated by gel electrophoresis. The size of the fragments is determined by comparing them to a DNA ladder. The presence of specific bands indicates the presence of a particular allele. This method is highly accurate and reliable for identifying individuals.

# BACKGROUND INFORMATION

## Background Information, continued



If the... PCR... DNA... RFLP... AMPFLP... Taq...

A... PCR... 1984... 1994... Taq... (15-30...)

I... PCR... 94°C... 65°C... 72°C... Taq... PCR... 20-30...

I... PCR... DNA... D1S80... PCR... Taq...

Figure 2 - The Polymerase Chain Reaction (PCR)

