

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 use PCR to amplify a specific VNTR region of human DNA and determine the number of repeats in that region. This is done by comparing the PCR products to a DNA ladder and measuring the size of the bands.

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BACKGROUND INFORMATION

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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 gel electrophoresis to determine the number of repeats.

The amplified DNA is then analyzed using gel electrophoresis. The DNA fragments are separated based on size, and the resulting bands are visualized using a DNA staining agent. The number of bands and their positions are used to determine the genotype of the individual. This technique is widely used in forensic science, paternity testing, and population genetics.



