1. Restriction Digestion and Analysis of Lambda DNA Kit

Explore the essential cloning techniques of restriction digestion and DNA gel electrophoresis. With the restriction digestion and analysis of lambda DNA kit, students use three different restriction enzymes to digest genomic samples of the lambda bacteriophage. Students separate these fragments using agarose gel electrophoresis and visualise them using Bio-Rad's safe Fast Blast DNA stain.

- Use a set of different restriction enzymes to generate distinct sets of DNA fragments of different sizes
- Fast results - separate the fragments in 10 minutes
- Optional sizing activity - guide students through the construction of a standard curve using their own gel data, then challenge them to apply their maths skills and use their standard curve to estimate the molecular weights of the fragments generated by different restriction enzymes
- Finish all activities in one to two 45 minute class periods

Code	Pack	Price
ELE1446	Each	**£164.72**

2. Forensic DNA Fingerprinting Kit

DNA evidence can be used to identify a perpetrator or exonerate the innocent. With this kit, students use real DNA as evidence and play the role of crime scene investigator. Six DNA samples are included: one sample has been collected from a "crime scene" and five others from various "suspects." Each sample is digested using a mixture of two DNA restriction enzymes to generate a distinct set of DNA fragments for each sample. The resulting DNA fragments are separated by agarose gel electrophoresis and visualised to determine "whodunit"!

- Real-world forensics - open the door to rich discussions about the scientific, ethical, and legal implications of forensics, DNA profiling, and genetic engineering
- Uses real DNA - the DNA samples provided are engineered to mimic the natural variations in DNA that exist between one human being and another
- Fast results - after restriction digestion, separate the fragments in as little as 10 minutes
- Optional sizing activity - guide students through the construction of a standard curve using their own gel data, then challenge them to apply their maths skills and use their standard curve to estimate the molecular weights of the fragments generated by different restriction enzymes
- Finish all activities in two 45 minute class periods
- Consumable reagents refill pack includes: DNA samples, DNA standard, restriction enzyme mix, sample buffer, and sterile water - for educational use only

Code	Description	Pack	Price
ELE1448	Forensic DNA fingerprinting kit	Each	**£180.81**
ELE1450	DNA fingerprinting kit refill pack	Each	**£117.24**

1 BIO-RAD



2 BIO-RAD

