# nucleic acid sequencing electrophoresis cell for gel

Nucleic acid sequencing electrophoresis cell is a kind of electrophoresis equipment designed for high-resolution nucleic acid separation and analysis, which is widely used in the fields of genetic marker analysis, mutation detection, protein-DNA interaction and so on.

Nucleic acid sequencing electrophoresis cell combines highly efficient heat transfer structure and humanized operation design, which can meet the parallel electrophoresis requirements of high-throughput nucleic acid samples, and is suitable for fine DNA fragment resolution, such as AFLP, amplified fragment length polymorphism, SSCP, single-strand conformation polymorphism, HA, denaturing gradient electrophoresis and other experiments.

## Features of Nucleic Acid Sequencing Electrophoresis Cell

1. High-efficiency Heat Dissipation System: Adopting high-purity elastic aluminum plate, after special treatment, it can realize rapid and uniform heat dissipation, avoiding the phenomenon of “smiley face” strips, and ensuring the electrophoresis strips are straight and clear.
2. High throughput capacity: Up to 96 PCR samples can be synchronized electrophoresis at one time, which is suitable for microtiter plate or lance sampling.

3. Special shark-tooth comb design: optimized shark-tooth structure prevents sample crosstalk and ensures independent separation of samples. precise comb spacing facilitates rapid sample addition and band observation.
4. Simple and solid structure: only four knobs are needed to complete the electrophoresis cell sealing and installation, saving time and labor.
5. Energy-saving and environmental protection design: small volume of buffer required, precise structure of colloid, eliminating leakage of glue and liquid, reducing operation cost.
6. Safety protection mechanism: equipped with automatic power-off function when the cover is opened, eliminating the operation of bare power supply and guaranteeing the personal safety of users.
7. removable bottom cell design: movable bottom cell and liquid discharge port for easy removal of residual liquid, convenient maintenance, enhance the cleanliness of the laboratory.

**Core Advantages**

1. high band resolution: “no smile” phenomenon, suitable for the migration rate of small differences in sensitive experiments.
2. high efficiency of sampling: support the use of automated equipment, such as multi-channel pipette, to improve the consistency of sampling.
3. good reproducibility of results: constant electric field and thermal stability to ensure the repeatability of each experiment, reliable data.

4. strong adaptability: suitable for a variety of denaturing or non-denaturing electrophoresis experiments, compatible with polyacrylamide and agarose gels.
5. low operation threshold: suitable for teaching laboratories, research institutions and clinical testing personnel.

## Working Principle

Nucleic acid sequencing electrophoresis cell is based on the principle of vertical polyacrylamide gel electrophoresis, which causes DNA or RNA to migrate and separate by molecular size in the gel medium through the action of electric field. During the electrophoresis process, the heat is rapidly exported from the aluminum backing plate to maintain the uniform gel temperature and avoid the separation deviation caused by thermal gradient. After separation, silver staining, fluorescent labeling, radiation autoradiography and other detection methods are available.

| **Model** | **EC10** |
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| Gel size | 310x330mm |
| Gel thickness | 0.4mm |
| Number of samples | 68, 99 |
| Buffer volume | 750mL |