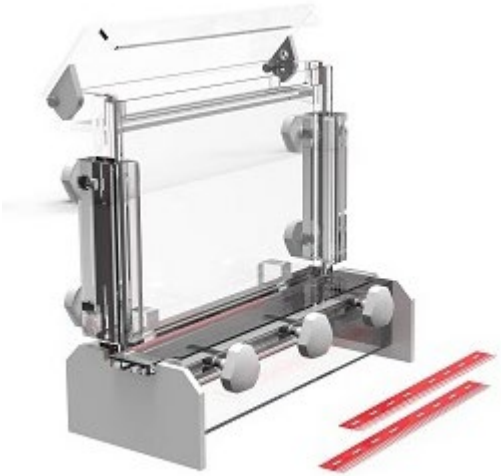
nucleic acid sequencing gel electrophoresis cell 340x300mm

nucleic acid sequencing electrophoresis cell adopts advanced liquid cooling system and high-efficiency electrophoresis structure, which is capable of completing the separation of large volume of samples in a relatively short time.

Nucleic acid sequencing electrophoresis cells are suitable for parallel analysis of multiple samples, such as high-throughput PCR product screening, mutation detection, genotyping, etc. The electrophoresis cells can be used for the simultaneous analysis of multiple samples.



Features

1. Buffer cooling: The electrophoresis cell is cooled by both upper and lower buffers to maintain the temperature balance of the gel during the running process, preventing the temperature rise from causing migration abnormality.
2. Support high voltage electrophoresis: High-voltage resistant structure design allows high power electric field to be applied in a short time, which significantly shortens the electrophoresis time and improves the experimental efficiency.

3. Bi-directional liquid discharge structure: The upper and lower cells are equipped with independent liquid discharge ports, which can eliminate residual liquid more thoroughly and make cleaning and maintenance more convenient.
4. High-throughput operation design: 96 sample wells can be electrophoresed at one time, which is suitable for standard PCR experimental process and saves operation time.
5. High-quality shark teeth sampling comb: designed for multi-channel pipette sampling, preventing sample diffusion or cross-contamination, with neat and clear bands.
6. Leak-proof structure optimization: adopting multi-point fastening design and high sealing colloid cell, no liquid leakage during electrophoresis.
7. Intelligent safety protection: Equipped with automatic power-off device for opening the lid, effectively preventing accidental contact with electric current during operation and enhancing the safety level of laboratory.

Advantages

1. fast electrophoresis: thanks to the support of high voltage operation and temperature control system, the electrophoresis process time is significantly shortened.
2. Strong thermal stability: buffer cooling system maintains constant temperature of the gel during the whole running process, avoiding bending or spreading of bands due to localized heating.

3. high efficiency of sample filling: the optimized structural design for lance operation improves the efficiency of sample filling and is suitable for high-throughput genetic analysis tasks.
4. safe and reliable: equipment details are fully considered to avoid the risk of electric shock and liquid leakage, operation more at ease.
5. simple maintenance: liquid discharge port and movable bottom cell design, so that the cleaning is more rapid and thorough, reducing the difficulty of equipment maintenance.

Working Principle

Nucleic acid sequencing electrophoresis cell is based on vertical polyacrylamide gel electrophoresis technology, by applying an electric field in the gel, nucleic acid molecules are migrated and separated according to their size differences. In order to cope with the heat accumulation problem caused by high-throughput operation, the electrophoresis cell maintains the gel temperature stable and ensures the consistency of migration rate by synchronously injecting buffer into the upper and lower cells and assisting in heat dissipation. It is suitable for high-resolution electrophoresis experiments in denaturing or non-denaturing state.

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Model	**EC20**
Gel size	340x300mm
Gel thickness	0.4mm
Number of samples	68, 99
Buffer volume	1550mL