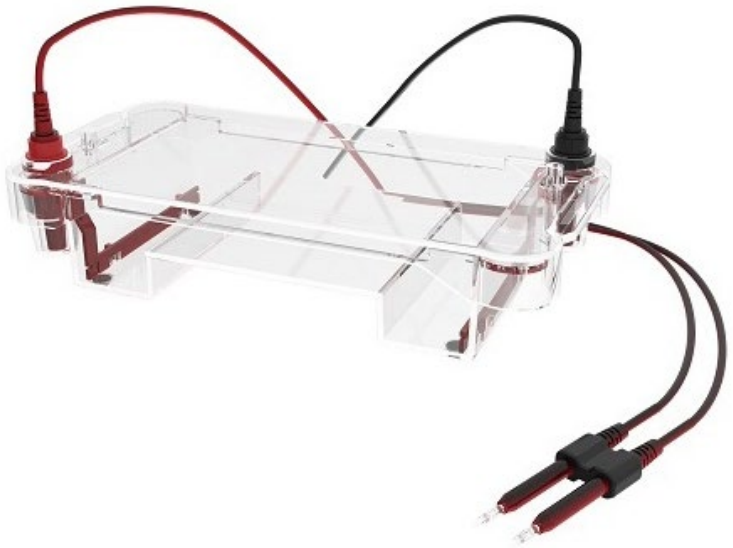
multi purpose horizontal electrophoresis cell for agarose

Multi purpose horizontal electrophoresis cell is an experimental equipment designed for molecular biology and chemistry experiments, widely used in the separation and analysis of DNA, RNA and protein.

Multi purpose horizontal electrophoresis cell is made of high strength and high transparent material, which has excellent high temperature resistance, corrosion resistance and no leakage. multi purpose horizontal electrophoresis cell is reasonably designed, equipped with special glue making tank and background strip scale, easy to operate, suitable for use in different scientific research environments.



Main Features of Multi Purpose Horizontal Electrophoresis Cell

1. high-strength transparent material: the electrophoresis tank is injection molded with high-strength, highly transparent material, which has good high temperature resistance and can withstand long time high temperature use, and at the same time, the material has high transparency, which is convenient for observing electrophoresis process.

2. Multi-size gel production: The equipment is equipped with a special gel-making tank, which can produce four different sizes of gels to meet different experimental needs. Users can choose suitable gel specifications according to the experimental requirements, increasing the applicability of the equipment.
3. easy-to-operate tray design: the bottom of the tray is equipped with a background strip and a ruler, which helps the experimenter to accurately apply samples and observe electrophoretic bands, and improves the precision and visibility of the experiment.
4. Limit function: Built-in limit design ensures accurate positioning for each operation, avoiding errors caused by improper operation and ensuring the reliability of the experiment.
5. removable electrode design: the electrophoresis tank is equipped with removable electrodes, which is convenient for daily cleaning and maintenance. The cleaning and replacement of electrodes become easier, effectively prolonging the service life of the equipment.
6. safety design: the automatic power-off function can effectively avoid the electrophoresis tank cover is not closed in the case of continuing to energize, reduce the risk of electric shock or equipment damage due to improper operation, to ensure the safety of experimental personnel.
7. high purity platinum electrode: 99.99% high purity platinum electrode is adopted, which has very high conductivity and can ensure stable current during electrophoresis, meanwhile, it improves the durability of the electrode and prolongs the use cycle of the equipment.

Advantages of Multi Purpose Horizontal Electrophoresis Cell

1. High efficiency and high purity electrodes: equipped with high purity platinum electrodes, the conductivity and electrophoresis effect are greatly improved, which makes the electrophoresis process smoother and the separation efficiency higher.
2. Safety guarantee: the design of opening cover and disconnecting power avoids the electrophoresis tank working accidentally, improves the safety of the equipment and reduces the risk of experimental accidents.
3. Cleaning and convenient: the removable electrode design makes the cleaning and maintenance of electrode more convenient and ensures the long-term stability and efficient performance of the equipment.
4. precise operation: the design of the background strip and scale makes the sampling process more precise, avoiding experimental errors and improving the accuracy of the experiment.
5. strong durability: the use of highly transparent materials, with good resistance to high temperature and chemical corrosion, to ensure the long-term stability of the electrophoresis tank.

Working Principle

multi purpose horizontal electrophoresis cell separates charged molecules (e.g. DNA, RNA or proteins) according to their size and charge by applying an electric field to the gel. In an electrophoresis tank, the sample is co-located with the gel and the electric field drives the molecules to migrate towards the electrodes. Since the migration rate of molecules in the gel is closely related to their size, morphology, and charge, by observing the position of molecules in the gel, experimenters can analyze the composition of different samples.

This electrophoresis tank provides a constant current through an external power supply, which separates the samples in the gel and produces observable bands. The background strip and ruler are designed to help accurately position the sample, while the high-purity platinum electrodes provide strong electrical conductivity to ensure the stability of the electrophoresis process. The background strip on the bottom of the tray enhances the visibility of electrophoresis results and ensures that each step of the electrophoresis process can be accurately tracked.

Model	**EH20**
Gel size	large gel: 120x120mm, wide gel: 120x60mm, long gel: 60x120mm, small gel: 60x60mm
Number of samples	2, 3, 6, 8, 11, 13, 18, 25
Buffer volume	700mL