

Multi functional horizontal electrophoresis tank

Product Number: ME120

Description

It is mainly composed of an electrophoresis down tank, a easily replaceable electrode stand, a top cover, gel trays, a glue caster and sample combs.

This electrophoresis tank and electrophoresis power supply constitute electrophoresis device for rapid separation of DNA and NA samples.

Features

1. Gel size(L×W): 6cm×6cm; 12cm×6cm; 6cm×12cm; 12cm×12cm.
2. Sample combs: 25+11 teeth; 13+6 teeth; 18+8 teeth; 2+3 teeth.
3. Thickness of sample combs: 1.0mm, 1.5mm, 2mm.
4. Main part is made of PC by injection mould in beautiful shape.
5. Electrode is made of precious metal platinum with electrolytic corrosion and high temperature resistance, more than 99.95% high purity, it has good electrical conductivity, easy clean and replaceability.
6. Normal working conditions: ambient temperature (0~40)°C; relative humidity ≤80%; none strong vibration around; test bench should be kept level.
7. Electrophoresis tank can work 24hrs continuously.
8. Power off when open the cover, it is safe.
9. Maximum voltage allowed for an external electrophoresis power supply is 200V, Electricity is 200mA.
10. Dimension(L×W×H): 31cm×15cm×9cm.
11. Buffer capacity: 650ml.
12. N.W.: 1.1kgs.

Instruction

Gel making: small gel, wide gel, long gel or square gel can be made as needs.

Methods of gel making in four different specifications:

1. Small gel (6cm×6cm): each glue caster can hold two pieces of small gel. Please put the selected two small gel trays into glue caster in parallel, then insert the sample comb (with a notch in middle) you need into the positioning slot of glue caster, and pour heated agarose gel solution (note: gel solution temperature should be is around 60°C, and sampling hole is near negative electrode).
2. Wide gel (6cm×12cm): each glue caster can hold one piece of gel. Please put the selected gel tray into glue caster in parallel, then insert the sample comb you need into the positioning slot of glue caster, and pour heated agarose gel solution (note: gel solution temperature should be is around 60°C, and sampling hole is near negative electrode).
3. Long gel (12cm×6cm): each glue caster can hold one piece of gel. Please put the selected gel tray into glue caster in parallel, then insert the sampling comb you need into the positioning slot of glue caster, and pour heated agarose gel solution (note: gel solution temperature should be is around 60°C, and sampling hole is near negative electrode).
4. Big gel (12cm×12cm): each glue caster can hold one piece of gel. Please put the selected gel tray into glue caster in parallel, then insert the sampling comb you need into the positioning slot of glue caster, and pour heated agarose gel solution (note: gel solution temperature should be is around 60°C, and sampling hole is near negative electrode).

Protocol

1. Pull out the sample comb gently after gel polymerization (note: pull out one side first, otherwise it will have vacuum in glue hole to make parts of gel taken out of sample hole together with the comb if pull it out vertically), then transfer the gel tray with



gel into electrophoresis tank.

2. Add electrophoresis buffer in the electrophoresis tank to immerse gel completely, and buffer solution level should be 1.0mm-2mm higher than rubber surface.
3. Add samples into sample hole after pulling out the sample comb, and avoid introducing bubbles when adding samples.
4. Close the top cover, switch on the electrophoresis power supply, please don't mistake positive and negative anodes.
5. Please select appropriate electrophoresis power parameters for electrophoresis accordingly. Long gel needs higher voltage, time for electrophoresis is short, but high heat, low resolution, that is suitable for screening samples or detect sample purity. Oppositely, it needs a long time if low voltage, less heat and high resolution.
6. After experiment, firstly turn off electrophoresis power, then pull out electrophoresis tank wire (1 red 1 black), and take out gel trays.

Maintenance

Packaged products should be stored in an indoor environment of temperature -40°C to 55°C, 93% relative humidity at most, no corrosive gases and well-ventilated.

Please keep the electrophoresis tank clean, it can be washed with a sponge dipped a little detergent, then rinsed with non-ionized water and dry in a dust-free place before using.

Matched Power Supply

There are many specifications and models of electrophoresis power supply, general models can match this product.

Electrophoresis power supply must be operated strictly in accordance with its operation instruction.

This product should be kept a certain distance away from electrophoresis power supply when it is working. And it is strictly prohibited to use electrophoresis tank on electrophoresis power supply.

Note

The platinum wire electrode installed in down slot of this product is easily broken, so it should be careful during operation. If the electrode is damaged, you can purchase a new one to change the electrode stand, no need to send electrophoresis tank to the manufacturer for replacement.

Gel tray of this product has a fluorescent scale line for UV observation.

Specification

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| Large area of electrophoresis tank carrying gel | 120mm×120mm |
| Types of adhesive trays | 120mm×120mm; 120mm×60mm; 60mm×120mm; 60mm×60mm |
| High voltage load | 500V |
| Total volume of buffer solution accommodated | 650mL |
| Specification of rubber frame | 60mm×60mm, glue filling amount: 25-30mL per piece |
| | 60mm×120mm, glue filling amount: 45-50mL per piece |
| | 120mm×120mm, glue filling amount: 90-100mL per piece |
| Sample comb specifications | 1.0mm 25teeth, maximum sample size: 15μL |
| | 1.5mm 18teeth, maximum sample size: 25μL |
| | 1.5mm 13teeth, maximum sample size: 50μL |
| | 2.0mm 3teeth, maximum sample size: 80μL (Marker)/200μL /300μL/550μL |