

## Rotaphor System 6.0

### Pulsed Field Gel Electrophoresis (PFGE) System for the Separation of Large DNA Molecules

- Separation of large DNA molecules (up to 8 Mb = 8,000 kb)
- Patented electrode rotor allows free electrical field angle
- Exceptional resolution
- Optimised protocols for different size ranges

#### Rotating field electrophoresis (ROFE)

Pulsed field electrophoresis with the Rotaphor system allows the separation of DNA beyond the 50 kb limit of conventional agarose electrophoresis. Thanks to the patented electrode rotor, the electrical field can be applied in virtually any angle. To achieve a very homogeneous field, the two main rotor electrodes are flanked by 2 sets of secondary electrodes each.

#### Flexibility

Due to the unique design of the Rotaphor system, all common techniques for separation of large DNA molecules can be applied. This includes methods like CHEF, PAGE and naturally ROFE (Rotating Field Electrophoresis).

#### Buffer management

Since PFGE gels typically run for many hours (up to several days), the electrophoresis buffer has to be cooled. The Rotaphor electrophoresis chamber comes with a built-in buffer circulation



pump which is connected to an external cooling thermostat. During the run the buffer temperature in the electrophoresis chamber is constantly monitored and precisely controlled by the Rotaphor software.

#### Easy control

The Rotaphor system includes a PC that controls the electrode rotor and the power supply over the Rotaphor interface card. The Rotaphor 6.0 software provides 17 pre-set programs for separation of different size ranges. Starting with the pre-set parameters, new applications are quickly optimised.

For each pre-set program the software shows a real gel image. Once a custom program has been optimised, a referring gel picture can be uploaded into the software. Thus, the Rotaphor software over time will not only be a control tool, but also a library of successful experiments linked to the underlying separation parameters. By linking programs to combined lists also complex sequences can be programmed.



Rotaphor rotor with computer controlled electrodes and connection plug. Electrodes are freely rotatable, thus providing a maximum of flexibility.

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## Order Information

Item	Order No.
<b>Rotaphor 6.0 System</b> , 230 V, PC with Windows® operating system (German)	021-100
<b>Rotaphor 6.0 System</b> , 110 V, PC with Windows® operating system (English)	021-190
<b>Rotaphor 6.0 System</b> , 230 V, PC with Windows® operating system (English)	021-200
The Rotaphor System includes: Electrophoresis chamber with electrode rotor and internal buffer circulation, power supply, gel tray, comb (18 well), frame for gel casting, sample mould, connection cables, computer with interface card and pre-installed Rotaphor 6.0 software	
<b>Refrigerating circulator KH-6</b> (230 V), operating temperature range - 10 °C to + 80 °C	043-500
<b>Refrigerating circulator KH-6</b> (115 V), operating temperature range - 10 °C to + 80 °C	043-590
<b>Accessories</b>	
Combs for 20 cm x 20 cm gels	
18 wells	021-011
25 wells	021-004
40 wells	021-005
50 wells	021-006
18 wells (for liquid samples)	021-007
Combs for 18 cm x 13 cm gels	
5 wells	021-008
12 wells	021-009
20 wells	021-010
Sample casting form (for 20 embedded samples, 14 mm x 10 mm x 1 mm each)	021-003
Preparative gel casting kit, 13 cm x 18 cm gel casting tray, comb 5 wells (3 marker slots, 2 preparative slots), comb 12 wells	021-001
Gel tray (20 cm x 20 cm gels) and casting frame	021-002