**Multi-pipette type**

Designed with slightly larger dimensions, the new Mupid®-ex allows formation of 13 or 26 lanes.

**UV transmittance**

The Direct-Visible Tank of Mupid®-ex is made of a special plastic with high rate of ultraviolet-ray transmittance (50% for 254-nm; 80% for 312-nm)

**Timer function incorporated**

The user can set the timer within a range of 0 and 99 minutes for power supply to the system, or for continuous power supply.

**Split Type Power Supply**

The Intelligent Power Supply can be separated from the Direct-Visible Tank.

- Intelligent Power Supply
- Direct-Visible Tank
- Safety Cover
- Gel Tray
- Comb
- Gelmaker Stand
Congratulations on your new Mupid®-ex!

Mupid®-ex is a state-of-the-art, upper-level model of the Mupid® Series, Advance’s series of electrophoresis systems, that integrates opinions and requests received from users as many as practicable.

We are sure that your Mupid®-ex will bring you many years of laboratory experiments and productive researches. We’ll spare no effort to achieve further upgrading of the series to come up to your expectations.
# Before Use

Please read this manual carefully before you start to operate your Mupid®-ex.

This manual provides general information on the features and capabilities of Mupid®-ex that should help you understand your equipment better to ensure proper handling.

## Explanation of symbols

- **Caution, risk of electric shock.**
  Be sure to follow the instruction.

- **Caution, hazardous to health.**
  Be sure to follow the instruction.

- **Unplug the Power Supply from wall outlet.**
  If not followed, it could lead to electric shock.

- **Warning.**
  If not followed, it could lead to a serious injury or damage.

- **Warning for laboratory use.** If not followed, it could damage the product or could affect the experimental results.

## Packing List

**Product reference: MU-0040-**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrophoresis unit – Cell unit</strong></td>
<td></td>
</tr>
<tr>
<td>Cell Unit (Direct Visible Tank)</td>
<td>1</td>
</tr>
<tr>
<td>Safety Lid</td>
<td>1</td>
</tr>
<tr>
<td>Intelligent Power Supply</td>
<td>1</td>
</tr>
<tr>
<td><strong>Gel casting system</strong></td>
<td></td>
</tr>
<tr>
<td>Gel tray (normal)</td>
<td>2</td>
</tr>
<tr>
<td>Gel Tray (large)</td>
<td>1</td>
</tr>
<tr>
<td>Comb</td>
<td>4</td>
</tr>
<tr>
<td>Casting Stand</td>
<td>1</td>
</tr>
<tr>
<td><strong>Instruction Manual</strong></td>
<td>1</td>
</tr>
</tbody>
</table>
Safety Instructions

Do not touch this product with wet hands.

Do not put your fingers or foreign matter in the cell during electrophoresis.
Avoid touching the electrode connectors during electrophoresis.

Use the cell lid included in the package, which is designed exclusively for use with the Mupid®-ex Electrophoresis Cell Unit. Do not attempt to use any other lid.

Before disconnecting the power supply from the Mupid®-ex Electrophoresis Cell unit, verify that the power switch ON the power supply is OFF.

The Mupid®-ex Electrophoresis Cell Unit and gel trays allow high transmittance of ultraviolet rays, which are hazardous to eyes and skin. Wear safety glasses and protective gloves when handling the unit and trays in ultraviolet rays.

Unplug the Mupid®-ex Power Supply from wall outlet when the product is not in use.

The Mupid®-ex Power Supply is designed for use anywhere in the world, with input voltages of 100 to 240 volts. Be sure to use an approved power cord that meets the voltage standard in your region.

After you operate electrophoresis in the continuous run mode, make sure that electrophoresis is completed before you turn the power switch on the Power Supply off.

If you need to use the Mupid®-ex Electrophoresis Cell Unit with any other power supply, follow the instructions given in the manual for such a power supply. Eurogentec s.a. is not responsible for any injury or damage caused by the use of equipment or apparatus irrelevant to this system.

The Mupid®-ex Power Supply is provided with vent holes on its sides and bottom. Do not cover them. Take care not to allow liquids to enter through these holes.

Disconnect the Power Supply from the Mupid®-ex Electrophoresis Cell Unit before moving the unit from one point to another. Hold the unit and power supply firmly with both hands if you need to move them together. Take care not to load on the electrode connector as it could be damaged if loaded.

Keep in mind that it may become the cause of failure if moisture enters the inside of equipment from a vent hole (fresh air inlet) or the gap of equipment, since the power supply of this equipment is not waterproofing structure. Moreover, when waterdrop etc. is on an operation panel plane, please wipe off moisture with soft cloth etc. immediately.

When direct sunlight and strong light (incandescent lamp, spotlight, etc.) shine upon this equipment, disturbance light may incident on a lid sensor and there is a case that the lid close state may be unable to be recognized. In such a case, please use this equipment, keeping it away from direct sunlight or the strong light.
**Mupid®-ex Construction and Functions**

**Electrophoresis Cell Unit**

### Vent slit
For heat release. The slit can also be used for eye observation of electrophoresis.

### Grip
The cover can be removed easily with single hand while it is used in case separating the cell unit from the power supply.

### Optical reflector
Allows the system power to be turned on when a signal is received from the optical sensor on the Power Supply. To ensure safety, this reflector will not function if the cell lid is not in place.

### Platinium electrodes
These electrodes are mounted onto their holders. Electrode at the back is a cathode plate, and that at the front anode plate.

### Gel bed
Gel trays are placed on this bed for casting prepared gels.

The Cell Unit is formulated of ultraviolet-ray transmitting plastics.
Safety sensor
This optical sensor detects the cell lid sit flush with the unit. If the lid is not in place, the power supply connection will not be made.

Timer display
The preset time and the remaining time of operation are indicated on this display panel. Roll display appears on the panel in the continuous run mode.

Timer set button
This button allows you to set the required run time within the range of 1 to 99 minutes. Set “0” for continuous run mode (“c” will be displayed on the panel).

Voltage selector
Press this selector to choose a 25 V, 50 V, 100 V or 135 V output. The peak voltage is 160 V constant for any output voltage chosen, but the actual voltage is changed by waveform control in the same way as for existing models of the Mupid® Series.

Output button
Use this button to turn the selected voltage on/off. The voltage output can also be temporarily stopped. The blue LED remains lit when the system power is on.

Power Supply
The Power Supply is equipped with timer function, last voltage memory, overcurrent protector and others.

Electrode connector
Connects the electrodes to the Power Supply. This connector is metal-plated and can be cleaned whole with water.

Power Supply holder
Supports part of the weight of the Power Supply.

Rear side of Power Supply
There is an electric power input plug. Wide-range correspondence of AC 100 to 240 V. Worldwide use.
Casting System

**Gel tray (normal)**

Making gel on the tray. Convenient transmittance of ultraviolet rays for observation using transilluminator.

6 cm Migration distance. Wider than any existing of the Mupid® Series, and compatible with the multipipette.

**Gel tray (large)**

12 cm Migration distance. Many samples can be electrophoresized with plurality of combs.
Combs

Set these combs in the casting stand to form wells. Two types of combs are provided: one has 13 teeth (for 6-mm wide wells), and the other 26 (for 2.5-mm wide wells). The pitch of each comb is compatible with the multipipette.

Casting Stand

Set gel trays into this stand to cast gels.
Casting Gels

1. Place the casting stand on a level surface. 
   Remove the center partition when the large gel tray is used.

2. Place gel tray(s) into the casting stand. 
   Two gels can be cast simultaneously with normal size trays.

3. Weigh the required amount of agarose powder into an 
   Erlenmeyer flask and add an appropriate amount of 
   buffer. Heat the prepared solution until agarose 
   completely dissolves.

4. Allow the agarose gel solution to cool down to 70 °C or less before pouring. 
   ! Failure to cool the solution sufficiently could deform the stand and gel tray.

5. Select either type of comb, 13- or 26-toothed, 
   according to the test requirement, and put the 
   selected comb into the casting stand. 
   Electrophoretic distance and the number of samples 
   depend upon the number of combs you set.

   ! In case of setting four combs, stand in comb 
   partitions with round marks for getting equal 
   intervals (Lower right figure).

   ! Setting the combs after pouring in agarose 
   solution previously may be approved. 
   Air bubbles in the gel of high concentration 
   can easily removed in this method.
6. Pour the prepared agarose gel solution into the gel tray previously set into the casting stand in step (3) above. The amount of gel solution to pipette depends upon the gel thickness you wish to obtain. About 30 ml of solution is required to yield a gel 4 mm thick in small size trays. About 60 ml of solution is required in large size trays.

**USE 0.5 X TBE or 0.5 X TAE BUFFER ONLY**

7. Push the gel tray bottom with a glass rod to remove air trapped underneath the tray; this must be performed before the gel solution begins solidifying. Also check for any air bubbles on the surfaces and/or inside of the gel solution. If air bubbles are present, remove them using a pipette.

8. Allow the gel solution to solidify for about 15 to 20 minutes at room temperature. It may take longer time when the gel is less concentrated.

9. Remove the comb(s) with both hands by gently pulling upwards. Check that the gel is completely solidified in rectangular wells and that it is free of air bubbles.

10. Hold the gel tray on the both sides at the notches of the casting stand. Pull the tray upwards. Gel preparation is now complete.

To store the gel, keep it in the tray and saturate with a small quantity of running buffer and cover the whole gel and tray with food protection film or other similar material to protect it from desiccation and contamination.
Operating Electrophoresis
(Loading Samples and Running Gels)

1. Connect the Power Supply to the Electrophoresis Cell Unit.

2. Connect the power cord to the Power Supply. Plug the Power Supply into a wall outlet.

   Make sure to use an approved power cord that meets the voltage standard in your region.

   Input voltage is automatically detected by the system. No transformer is required in Europe and any other region where the standard voltage is higher than in Japan.

3. Set the timer. Increase or decrease the value. You can set the required run time between 1 minute and 99 minutes. Set "0" for continuous run mode ["c" will appear on the display panel].

   Blinking of blue LED indicates that timer operation is in pause state. In case of timer setup from this state, please set up after carrying out the long time pushing (about 2 seconds) of output button to reset a timer.
4. Choose the required output voltage from among 25 V, 50 V, 100 V and 135 V. The peak voltage is 160 V constant for any output voltage chosen, but waveforms are different according to the selected voltage output. Waveforms are as shown in the illustration.

5. Place the gel previously prepared on the gel bed of the Cell Unit, without removing it out of the tray. For a large gel, place the tray in such a way that its center groove engages with the Cell Unit’s rib. Be careful for gel not to slide down from a tray.

Electrode at the front of the Mupid®-ex Power Supply is positive. For electrophoresis of nucleic acid, set the gel so that its wells come to face the back panel.

6. Pour running buffer into the Cell Unit to such a level that the gel is fully submerged (about several millimeters over the upper surface of the gel). Approximately 300 to 350 ml of buffer is required.

**USE 0.5 X TBE or 0.5 X TAE BUFFER ONLY**

Cool the buffer solution beforehand if electrophoresis is to be run at 100 volts or more for a long time.

If there are too many amounts of buffers poured into the Cell Unit, the migration current increases carelessly and the current supply may be stopped by the over-current protection function of this equipment during migration. Please take care for the amount of buffer solution especially when using high concentration buffer.

**Standard**

<table>
<thead>
<tr>
<th>Gel thickness</th>
<th>Minimum volume (buffer solution only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 mm small</td>
<td>About 300 to 320 ml</td>
</tr>
<tr>
<td>4 mm large</td>
<td>About 270 to 290 ml</td>
</tr>
</tbody>
</table>
7. Pipette a desired amount of sample into wells. Up to about 12 µl of sample can be loaded into each 6-mm wide well, and up to about 4 µl into each 2-mm wide well. If a multipipette is used for 2.5-mm wells, arrange them alternately as shown in the illustration.

8. Set the cell lid in place so that its reflector side comes to face the Power Supply.

9. Press the output button to turn on the Power Supply. The blue LED will light, indicating that the system power is on. Also, check that air bubbles are observed from electrodes as this indicates that power is actually being supplied to the unit.
10. The following are observed or performed during electrophoresis operation:

- **In the timer mode**
  
  The remaining time is indicated in minutes on the timer display, and the LED point flashes on and off every second.

- **In the continuous run mode**
  
  Roll LED display appears on the panel in the continuous run mode.

- **In the current limiting mode**

  The Mupid®-ex Power Supply reduces current increasing and temperature rising. If the output exceeds the rated voltage, the voltage LED will flash on and off continuously to indicate current overload. The voltage is automatically adjusted to control the systems output power.

- **Temporary shutdown**

  Press the output button when you need to temporarily stop an electrophoresis run. The blue LED will flash on and off continuously to indicate a temporary shutdown. The remaining time of the timer setting will be retained in the memory. At pressing the output button for a second time, the stopped run will resume. If the cell lid is removed during electrophoresis, the system automatically shuts down. In this case, the system does not automatically restart when the lid is replaced in place. Press the output button to resume the run.

- **Timer resetting**

  To reset the timer, press the output button for about two seconds continuously while the timer display stops and the blue LED is blinking on and off. The preset time will be back on the display panel and the LED light will go out.

- **Overcurrent detection**

  The Mupid®-ex Power Supply is designed for protection against overcurrent. If a current exceeding the equipment capacity flows during electrophoresis, the Power Supply automatically shuts down and the voltage LED will flash on and off continuously to indicate overcurrent. Immediately unplug the power cord from the wall outlet. See what has caused the overcurrent or short circuit between the electrodes. Verify that there is no problem in operating conditions.

11. When the time set on the timer passes, the power is automatically off and an alarm sounds to indicate the operation is complete. If the system in the continuous run mode, make sure to press the output button to shut the Power Supply down.

12. When electrophoresis is finished, promptly proceed with staining and observing gels before bands start to diffuse.
Observing Bands

1. Remove the lid of the cell unit. In case separating the cell unit from the power supply, it can be separated easily by raising the lid to make it reversed with supporting a power supply as shown in the following figure.

2. The Mupid®-ex Electrophoresis Cell Unit and gel trays are made of plastics that allow excellent transmittance of ultraviolet rays. Therefore, bands can be observed by directly irradiating ultraviolet rays to the Cell Unit provided the gels or samples have been stained with fluorescent staining solution beforehand.

   When using ultraviolet rays, always wear safety goggles and protective mask to protect eyes and skin against exposure to these rays.

   If direct band observation is difficult, take the trays out of the Cell Unit.

3. If the gels or samples have not been stained beforehand, remove the gel tray from the unit.

4. Prepare a staining agent solution in an appropriate container. Place the gel in the container so that it is fully submerged in the prepared solution. The gel may be put in the container with or without its tray. Leave the gel immersed in the solution until bands are stained sufficiently for observation.

5. After completion of staining, carefully take the gel out of the container. Observe the gel using a transilluminator or other appropriate light source equipment. Select the optimal wavelength for the staining agent in use.

   Many of the staining agents are known to directly act to DNA and other biomolecules and are hazardous to health. Your extreme care is required when handling these agents to avoid skin exposure to them. Do not forget to wear safety gloves before handling the agent.
Follow appropriate hazardous materials disposal regulations according to the applicable instruction manuals when disposing of gels, buffers and staining solutions after use. Wash and clean the Electrophoresis Cell Unit and gel trays sufficiently if they are contaminated with staining agent solution.

**Maintenance**

- Do not keep the buffer solution in the Mupid®-ex Electrophoresis Cell Unit for a long time. Too concentrated running buffer (due to evaporation, for example) could not only affect your experiments but could also damage the electrodes.

- Be sure to disconnect the Power Supply from the Mupid®-ex Electrophoresis Cell Unit and unplug the power cord from the wall outlet before disposing of buffer solutions and cleaning.

- Because of the irradiation of ultraviolet rays, the Cell Unit and gel trays of this product will become deteriorated with time. With a standard transilluminator the ultraviolet-ray transmittance rate of the product will decrease by about 10 % after 100 hours of irradiation. Replace them as appropriately.

- Never brush the electrodes for cleaning. Brushing of electrodes results in burnout, disconnection or other trouble.

- Immediately dry the system when cleaned/rinsed with water. Avoid using a dryer or an autoclave. The use of these units causes the failure of the system.

- The components of this product are not compatible with acetone or any other organic solvents. Do not use organic solvents for cleaning. If not followed, it could lead to deformation of the components.

- The Mupid®-ex Electrophoresis System should not be modified or altered in any way.

- Although the Power Supply and Cell Unit of the Mupid®-ex Electrophoresis System are designed to allow their connection to other manufacturers’ equipment and apparatus, Eurogentec s.a. is not responsible for any injury or damage caused by the use of equipment or apparatus irrelevant to this system.

- Do not cover the Power Supply’s vent holes. Take care not to allow liquids to enter through these holes.
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause(s) and corrective action</th>
</tr>
</thead>
</table>
| **Power Supply ON indicator does not light up** | • Is the power cord properly plugged into a wall outlet and connected with the Power Supply?  
• Is an approved power cord meeting the voltage standard in your region in use?  
• Fuse may have blown out. Contact us.  
• If the equipment is overheated, unplug the power cord from the wall outlet. Check that there is no object covering the Power Supply vent holes. Leave the equipment at a cool, ventilated place for a while. |
| **Power Supply settings impossible**         | • Settings are not allowed during electrophoresis. Press the output button to shut it down.  
• To reset the timer while the timer display stops and the blue LED is flashing on and off, press the output button for about two seconds continuously.                                                                                                     |
| **No output voltage**                        | • Press the output button.  
• Is the cell lid properly placed?  
• Is the gel fully submerged in the running buffer?  
• Electrodes may have burnt out. Contact us.                                                                                                                                   |
| **Electrophoresis slowing down**             | • Is the voltage set to a proper level?  
• Check for running conditions such as the type and concentration of gel/buffer, and temperature conditions.  
• Has the buffer solution been in use too many times?                                                                                                                                  |
| **Band distortion**                          | • Are air bubbles trapped inside the gel?  
• Is the agarose dissolved completely?                                                                                                                                                    |
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause(s) and corrective action</th>
</tr>
</thead>
</table>
| Bands cannot be visualized   | • Is the staining solution concentrated to a sufficient level? Is the solution in use too many times?  
• Allow an extended time of staining.  
• Is the sample volume enough?  
• Is the wavelength appropriate for the staining agent in use?  
• If they are observed through the cell unit or gel trays, take the gel out and retry observation.  
• Try a shorter time of electrophoresis.                                                                                                                                 |
| Migration stops              | • It is thought that migration has stopped by current restrictions since there are too many amounts of buffers, or since concentration is high.  
Please refer to warning of page 13.                                                                                                                                                                                                   |
# Specifications

## Cell Unit (Direct-Visible Tank)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall size</td>
<td>183 mm(W) x 56 mm(H) x 164 mm(L)</td>
</tr>
<tr>
<td>Material characteristic</td>
<td>UV transmitting (254 nm ➞ 50 %, 312 nm ➞ 80 %) plastic</td>
</tr>
<tr>
<td>Solution Volume</td>
<td>Approx 330 ~ 500 ml (include buffer and Gels)</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>can use any existing Gel tray of Mupid® Series</td>
</tr>
</tbody>
</table>

## Safety Lid

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall size</td>
<td>183 mm (W) x 56 mm (H) x 164 mm (L)</td>
</tr>
<tr>
<td>Material characteristic</td>
<td>UV non-transmitting plastic</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
</tbody>
</table>

## Intelligent Power Supply

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall size(WxHxD)</td>
<td>164 mm (W) x 59 mm (H) x 64 mm (L)</td>
</tr>
<tr>
<td>Weight</td>
<td>380 g</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>100 ~ 240 V (Internationally compatible), 50 / 60 Hz</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>135 V ~ 100 V ~ 50 V ~ 25 V</td>
</tr>
<tr>
<td></td>
<td>Constant peak voltage for all (160 V) duty controlled</td>
</tr>
<tr>
<td>Timer</td>
<td>Timer Operation 0 ~ 99 min. and continuous (Temporary shutdown)</td>
</tr>
<tr>
<td>Safety photosensor</td>
<td>Infrared detector (detect of Lid setting)</td>
</tr>
<tr>
<td>Memory function</td>
<td>Automaticary memory of Select Voltage, Timer Setting</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
</tbody>
</table>

## Gel Tray

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gel tray (normal)</td>
<td>130 mm (W) x 13 mm (H) x 59 mm (L)</td>
</tr>
<tr>
<td>Gel tray (large)</td>
<td>130 mm (W) x 13 mm (H) x 122 mm (L)</td>
</tr>
<tr>
<td>Quantity</td>
<td>normal: 2</td>
</tr>
<tr>
<td></td>
<td>large: 1</td>
</tr>
</tbody>
</table>
### Comb

<table>
<thead>
<tr>
<th>Description</th>
<th>13 ~ 26 Wells</th>
<th>13 wells: 9 mm pitch</th>
<th>26 wells: 4.5 mm pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>4 (can make 13 • 26 wells)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gel Casting Stand

<table>
<thead>
<tr>
<th>Description</th>
<th>149 mm (W) x 20 mm (H) x 125 mm (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
</tbody>
</table>
Nucleic acid electrophoresis and detection

- **Standard of agarose concentration and DNA molecular cutoff**

  - **Respective concentration of agarose and the separable DNA size**

    | DNA Size Range(bp) | Recommended concentration (% w/v) |
    |-------------------|-----------------------------------|
    |                   | 0.5 X TBE Buffer                  |
    | 500 - 25000       | 0.70                              |
    | 300 - 20000       | 0.85                              |
    | 200 - 12000       | 1.00                              |
    | 150 - 6000        | 1.25                              |
    | 100 - 3000        | 1.50                              |
    | 50 - 2000         | 1.75                              |

  - **DNA size corresponding to mobility of BPB and XC in respective concentration of agarose.**

    | 0.5 X TBE Buffer |
    |-----------------|
    | % agarose | XC | BPB |
    |---------|----|-----|
    | 0.30    | 19400 | 2850 |
    | 0.50    | 12000 | 1350 |
    | 0.75    | 9200  | 720  |
    | 1.00    | 4100  | 400  |
    | 1.25    | 2500  | 260  |
    | 1.50    | 1800  | 200  |
    | 1.75    | 1100  | 110  |
    | 2.00    | 850   | 70   |

  *XC = XyleneCyanole*
Example of nucleic acid staining reagent

- **Staining method using ethidium bromide**

  1. **In case staining before electrophoresis**

     Add ethidium bromide solution into both of agarose gel and running buffer. 0.5 µg/ml is suitable for final concentration.

  2. **In case staining after electrophoresis**

     Immerse gel in the ethidium bromide solution of 0.5 µg/ml for 10 to 30 minutes.

     In case of high background after staining, the background can be lowered by immersing distilled water for 30 minutes.

     *Ethidium bromide is a strong cancerating substance. Take care for handling.*

**Features**

- Ultraviolet ray is not used but detectable with the naked eye.
- Staining in a short time is possible.

**Related products**

<table>
<thead>
<tr>
<th>Agarose</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agarose “Molecular Biology Grade”</td>
<td>100 g</td>
<td>EP-0010-01</td>
</tr>
<tr>
<td></td>
<td>500 g</td>
<td>EP-0010-05</td>
</tr>
<tr>
<td></td>
<td>1 kg</td>
<td>EP-0010-10</td>
</tr>
<tr>
<td>Agarose “Small Fragments”</td>
<td>50 g</td>
<td>EP-0020-05</td>
</tr>
<tr>
<td></td>
<td>100 g</td>
<td>EP-0020-10</td>
</tr>
<tr>
<td>AgaTabs Agarose</td>
<td>300 x 0.5 g tablets</td>
<td>EP-0030-15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SmartLadder</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartLadder • 200 to 10000 bp</td>
<td>400 lanes</td>
<td>MW-1700-04</td>
</tr>
<tr>
<td></td>
<td>1000 lanes</td>
<td>MW-1700-10</td>
</tr>
<tr>
<td>SmartLadder SF • 100 to 1000 bp</td>
<td>200 lanes</td>
<td>MW-1800-02</td>
</tr>
</tbody>
</table>
European offices

**BELGIUM**
Eurogentec Headquarters  
Tel.: + 32 4 372 74 00  
Fax: + 32 4 372 75 00  
info@eurogentec.com

**FRANCE**
Eurogentec France s.a.s.u.  
Tel.: + 33 2 41 73 33 73  
Fax: + 33 2 41 73 10 26  
info@eurogentec.com

**FRANCE**
Eurogentec France s.a.s.u.  
Tel.: + 33 2 41 73 33 73  
Fax: + 33 2 41 73 10 26  
info@eurogentec.com

**GERMANY**
Eurogentec Deutschland GmbH  
Tel.: + 49 221 258 94 55  
Fax: + 49 221 258 94 54  
info@eurogentec.com

**SWITZERLAND**
Eurogentec Succursale de Genève  
Français :  
Tel.: + 32 4 372 74 00  
Fax: + 32 4 372 75 00  
Deutsch :  
Tel.: + 49 221 258 94 55  
Fax: + 49 221 258 94 54  
info@eurogentec.com

**THE NETHERLANDS**
Eurogentec Nederland b.v.  
Tel.: + 31 43 363 40 37  
Fax: + 31 43 363 77 65  
info@eurogentec.com

**UNITED KINGDOM**
Eurogentec Ltd.  
Tel.: + 44 1794 511 411  
Fax: + 44 1794 522 417  
info.uk@eurogentec.com

**US office**

**USA**
Eurogentec North America, Inc.  
Tel.: + 1 858 793 2661  
Fax: + 1 858 793 2666  
info.usa@eurogentec.com

**Asian offices**

**JAPAN**
Nippon EGT  
Tel.: + 81 76 411 02 77  
Fax: + 81 76 452 03 99  
n-egt@nifty.com

**SINGAPORE**
RB EGT  
Tel.: + 65 6777 5366  
Fax: + 65 6778 5177