XCell SureLock® Mini-Cell
For leak-free electrophoresis of mini-gels

Catalog Numbers E10001, E10020, E10002

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# Kit Contents

## Types of Kits

This manual is supplied with the following kits:

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<thead>
<tr>
<th>Kit</th>
<th>Cat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCell SureLock® Mini-Cell</td>
<td>EI0001</td>
</tr>
<tr>
<td>SureLock Retrofit Kit for XCell II™ Mini-Cell</td>
<td>EI0020</td>
</tr>
<tr>
<td>XCell SureLock® Mini-Cell with XCell II™ Blot Module Kit</td>
<td>EI0002</td>
</tr>
</tbody>
</table>

## Kit Components

The components included with the different kits are listed below. See page 3 for more details.

<table>
<thead>
<tr>
<th>Kit</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCell SureLock® Mini-Cell</td>
<td>Gel Tension Wedge (1 each)</td>
</tr>
<tr>
<td></td>
<td>Buffer Dam (1 each)</td>
</tr>
<tr>
<td></td>
<td>Lower Buffer Chamber (1 each)</td>
</tr>
<tr>
<td></td>
<td>Buffer Core (1 each)</td>
</tr>
<tr>
<td></td>
<td>Mini-Cell Lid (1 each)</td>
</tr>
<tr>
<td></td>
<td>Gel Knife (1 each)</td>
</tr>
<tr>
<td>SureLock Retrofit Kit for XCell II™ Mini-Cell</td>
<td>Gel Tension Wedge (1 each)</td>
</tr>
<tr>
<td></td>
<td>Buffer Dam (1 each)</td>
</tr>
<tr>
<td></td>
<td>SureLock Mini-Cell Lid (1 each)</td>
</tr>
<tr>
<td>XCell SureLock® Mini-Cell with XCell II™ Blot Module Kit</td>
<td>EI0001</td>
</tr>
<tr>
<td></td>
<td>XCell II™ Blot Module</td>
</tr>
</tbody>
</table>

## Safety Information

See page 14 for safety information and explanation of symbols used on the instrument.

## Product Use

For research use only. Not intended for any animal or human therapeutic or diagnostic use.
Product Description

The XCell SureLock® Mini-Cell’s unique design allows you to run mini-gels quickly, easily, and leak-free without any clamps or grease. The set-up time is only 30 seconds; just drop the Buffer Core and the Gel Tension Wedge into the Lower Buffer Chamber, insert the gels, and pull the Gel Tension Wedge forward. The perfect no-leak seal results in no mess and consistent performance. Tough polycarbonate construction of the unit boosts durability. Retractable plugs, recessed jacks, and a specially designed lid enhance user safety. You can transfer with the optional XCell II™ Blot Module, using the same Lower Buffer Chamber.

Continued on next page
### Product Specifications, continued

#### XCell

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**SureLock® Mini-Cell Specifications**

- **Dimensions:** 11 × 12 × 16 cm
- **Upper Buffer Chamber Capacity:** 200 mL
- **Lower Buffer Chamber Capacity:** 600 mL
- **Material:** Polycarbonate
- **Electrode Wire:** Platinum (0.010” diameter)
- **Electrical Limits:** 1,500 VDC or 75 Watts
- **Temperature Limit:** 70°C

The XCell SureLock® Mini-Cell is impervious to alcohol, but not compatible with chlorinated hydrocarbons (e.g., chloroform), aromatic hydrocarbons (e.g., toluene, benzene) or acetone.

#### Gel Specifications

- **Gel Cassette:** 10 cm × 10 cm
- **Thickness:** 1.0 mm or 1.5 mm
- **Gel Size:** 8 cm × 8 cm
- **Combs:** 1 well, 2D well, 5 well, 9 well, 10 well, 15 well, and 17 well

#### Sample Well Capacity

The maximum recommended sample volume/well for different Novex® mini-gels is listed below. For additional details on loading volumes and maximum protein load, refer to the Novex® Pre-Cast Gel Electrophoresis Guide or the NuPAGE® Technical Guide (available at www.lifetechnologies.com).

<table>
<thead>
<tr>
<th>Gel Thickness</th>
<th>1 well</th>
<th>2D well</th>
<th>5 well</th>
<th>9 well</th>
<th>10 well</th>
<th>15 well</th>
<th>17 well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 mm</td>
<td>700 μL</td>
<td>400 μL</td>
<td>60 μL</td>
<td>28 μL</td>
<td>25 μL</td>
<td>15 μL</td>
<td>15 μL</td>
</tr>
<tr>
<td>1.5 mm</td>
<td>N/A</td>
<td>600 μL</td>
<td>N/A</td>
<td>N/A</td>
<td>37 μL</td>
<td>25 μL</td>
<td>25 μL</td>
</tr>
</tbody>
</table>
## Description of Parts

### Introduction
The various parts included with the XCell SureLock® Mini-Cell are described below. See page 20 for ordering information.

### Lower Buffer Chamber
- **Cat no.** EI0013
- The Lower Buffer Chamber has a capacity of approximately 800 mL of buffer and is used as a heat sink during the electrophoresis of proteins.

### Buffer Core
- **Cat no.** EI9014
- Buffer Core contains platinum electrodes, gold terminals, and silicone gaskets.

### Cell Safety Lid with Cables
- **Cat no.** EI0010

*Continued on next page*
Description of Parts, continued

**Gel Tension Wedge**

Cat no. EI0011
The positive locking action of the Gel Tension Wedge ensures trouble-free, leak-free electrophoresis of protein gels. Push the lever on the Gel Tension Wedge forward into a locked position to generate an even horizontal force which seals the gel cassette/Buffer Core assembly firmly into position in the lower buffer chamber.

**Buffer Dam**

Cat no. EI0012
Use the Buffer Dam when you need to run only one Novex® gel.

**Gel Knife**

Cat no. EI9010
Methods

Assembling the XCell SureLock® Mini-Cell

Removing Gel Cassette

1. Cut open the gel cassette pouch with scissors and remove cassette.
2. Drain away the gel packaging buffer.
3. Remove the gel cassette from the pouch and rinse with deionized water.

Note: Always handle the cassette by its edges only.

Always wear protective clothing when performing laboratory experiments.
To avoid contamination from possible residual acrylamide, wear protective gloves when loading and unloading the XCell SureLock® Mini-Cell and when preparing, staining/destaining, and drying gels.

Continued on next page
Assembling the XCell SureLock® Mini-Cell, continued

**Procedure**

1. Peel off the tape covering the slot on the back of the gel cassette.
2. Pull the comb out of the cassette in one fluid motion to expose the gel loading wells.
3. Use a pipette to gently wash the cassette wells with 1X running buffer. Invert the gel and shake to remove buffer. Repeat twice. Fill the sample wells with running buffer.

   **Note**: Be sure to displace all air bubbles from the cassette wells as they will affect sample running.

4. Lower the Buffer Core into the Lower Buffer Chamber so that the negative electrode fits into the opening in the gold plate on the Lower Buffer Chamber as shown in the figure.

   ![Diagram of the XCell SureLock® Mini-Cell](image-url)

*Continued on next page*
5. Insert the Gel Tension Wedge into the XCell SureLock® behind the buffer core. Make sure the Gel Tension Wedge is in its unlocked position (see next page), allowing the wedge to slip easily into the XCell SureLock® unit. The Gel Tension Wedge should rest on the bottom of the Lower Buffer Chamber.

6. Insert gel cassettes into the lower buffer chamber. Place one cassette behind the core and one cassette in front of the core. For each cassette, the shorter “well” side of the cassette faces in towards the buffer core. The slot on the back of the cassette must face out towards the lower buffer chamber (see figure below).

7. If you are running only one gel, replace the rear gel cassette with the Buffer Dam.

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Continued on next page
Assembling the XCell SureLock® Mini-Cell, continued

**Procedure, continued**

8. Pull forward on the Gel Tension Lever in a direction towards the front of the XCell SureLock® unit until lever comes to a firm stop and the gels or gel/buffer dam appear snug against the buffer core (see figure below).

When fully assembled, cassettes and Buffer Core are in place and Gel Tension Wedge is locked into position. Review the information provided on page 13 to troubleshoot your experiments.
Gel Electrophoresis Protocol

Sample Loading

1. Prepare your samples using the appropriate sample buffer at the desired protein concentration.

2. Prepare the appropriate running buffer (see page 18).

3. The Upper Buffer Chamber (cathode) is the void formed between the two gel cassettes (or one cassette and the buffer dam) on each side of the buffer core.

4. Fill the Upper Buffer Chamber with 200 mL of the appropriate running buffer (see page 18). Use enough running buffer to completely cover the sample wells.

5. Ensure that the Upper Buffer Chamber is not leaking. If the level of running buffer drops, the electrophoresis core and cassettes are not properly seated. Repeat steps 6 and 7 on page 7.

6. Use the pipette equipped with a round sample loading tip to underlay the samples into the gel wells (see figure below). Lower the tip to the bottom of the sample well and slowly pipet sample into well without contaminating another well with the sample.

If you have difficulty distinguishing the sample wells when loading the sample, see Troubleshooting (page 13).

Note: To obtain the best results and promote a uniform running of the stacking front, load sample buffer in all the wells, whether or not they contain samples.
1. Fill the Lower Buffer Chamber (anode) by pouring 600 mL of running buffer through the gap between the Gel Tension Wedge and the back of the Lower Buffer Chamber as shown in the figure below.

**Note:** If you are using Tricine and NuPAGE® Gels, we recommend that you fill the lower buffer chamber completely (600 mL) as this will help dissipate heat during the run. For other gel types, a filled lower buffer chamber is recommended, but not required. The XCell SureLock® Mini-Cell will function as long as the lower buffer chamber is filled enough to cover the slot at the bottom of the cassette.

2. Align the lid on the Buffer Core. The lid can only be firmly seated if the (–) electrode is aligned over the banana plug on the right. If the lid is not properly seated, no power will go through the mini-cell.

3. With the power **off**, connect the electrode cords to power supply {red to (+) jack, black to (–) jack}.

**Caution:** Power must be off before connecting the XCell SureLock® Mini-Cell to the power supply.

4. Turn on the power. See page 14 for running conditions for different gel types.
Disassembling the XCell SureLock® Mini-Cell

Procedure

1. At the end of the run, turn off the power and disconnect the cables from the power supply.
2. Remove the lid and unlock the Gel Tension Lever. There is no need to remove the Gel Tension Wedge.
3. Remove the gel cassettes from the mini-cell. Handle gel cassettes by their edges only.
4. Lay the gel cassettes (well side up) on a flat surface, such as the benchtop. Allow one edge to hang ~1 cm over the side of the benchtop.
5. Carefully insert the Gel Knife’s beveled edge into the narrow gap between the two plates of the cassette.

   Note: Do not push the knife forcefully between the cassette plates or you may cut into the gel.

6. Push up and down gently on the knife’s handle to separate the plates. You will hear a cracking sound which means you have broken the bonds which hold the plates together. Repeat until you have broken the bonds on one side.
7. Rotate the cassette and repeat Steps 5–6 of this procedure until the two plates are completely separated.
8. Upon opening the cassette, the gel may adhere to either side. Remove and discard the plate without the gel, allowing the gel to remain on the other plate.
9. If blotting, proceed to the Western Transfer Protocol without removing the gel from the plate (refer to the XCell II™ Blot Module manual, IM-9051 for more details).

   Note: Trying to remove the gel at this point may result in the gel tearing. Proceed to Step 11.

Continued on next page
Disassembling the XCell SureLock® Mini-Cell, continued

**Procedure, continued**

10. If staining, remove the gel from the cassette plate by one of the following methods:

   - If the gel remains on the shorter (notched) plate, use the sharp edge of the Gel Knife to remove the bottom foot of the gel. Hold the Gel Knife at a 90° angle to the gel and the slotted cassette plate. Push straight down on the knife to cut the gel. Repeat the motion across the gel to cut the entire foot. Hold the cassette plate and gel over a container with the gel facing downward. Use the knife to carefully loosen one lower corner of the gel and allow the gel to peel away from the plate.

   - If the gel remains on the longer (slotted) plate, hold the cassette plate and gel over a container with the gel facing downward. Gently push the gel knife through the slot in the cassette, until the gel peels away from the plate. Cut the foot off the gel after fixing and staining, but before drying.

11. Immediately fix, stain or transfer the gel as desired.

**Maintenance**

Wash the XCell SureLock® Mini-Cell with a mild detergent and rinse with deionized water after each use.
<table>
<thead>
<tr>
<th>Observation</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run taking longer than usual</td>
<td>Buffers are too dilute</td>
<td>Check buffer recipe; remake if necessary.</td>
</tr>
<tr>
<td></td>
<td>Upper buffer chamber is leaking</td>
<td>Make sure the buffer core is firmly seated, the gaskets are in place and the gel tension lever is locked.</td>
</tr>
<tr>
<td></td>
<td>Voltage is set too low</td>
<td>Set correct voltage.</td>
</tr>
<tr>
<td>Current reading on power supply is zero</td>
<td>Tape left on the bottom of the cassette</td>
<td>Remove tape from bottom of cassette.</td>
</tr>
<tr>
<td>or very low</td>
<td>Connection to power supply not complete</td>
<td>Check all connections with a voltmeter for conductance.</td>
</tr>
<tr>
<td></td>
<td>Insufficient buffer level</td>
<td>Make sure the upper buffer (cathode) is covering the wells of the gel. Be sure there is sufficient buffer in the Lower Buffer Chamber to cover the slot at the bottom of the gel.</td>
</tr>
<tr>
<td>Run is faster than normal with poor</td>
<td>Buffers are too concentrated or incorrect</td>
<td>Check buffer recipe; dilute or re-make if necessary.</td>
</tr>
<tr>
<td>resolution</td>
<td>Voltage, current, or wattage is set at a higher limit</td>
<td>Decrease power conditions to recommended running conditions (see page 14).</td>
</tr>
<tr>
<td>Cannot see the sample wells to load</td>
<td>There is little contrast between the sample</td>
<td>Mark cassette at the bottom of the wells with a marker pen prior to assembling the Upper Buffer Chamber.</td>
</tr>
</tbody>
</table>
Appendix

Safety Information

Safety

During operation, the XCell SureLock® Mini-Cell must be used with an external DC power supply designed specifically for electrophoresis applications. This power supply must be isolated from ground so that the DC output is floating. The PowerEase® 500 Programmable Power Supply (page 20) meets these requirements. The maximum electrical operating parameters for the XCell SureLock® Mini-Cell are:

- Maximum Voltage Limit: 1500 VDC*
- Maximum Power Limit: 75 Watts*
- Maximum Operating Temperature Limit: 70°C

The XCell SureLock® Mini-Cell’s lid is designed such that if the lid is removed, the electrical connection to the unit will be broken. Do not attempt to use the cell without the cell lid. Do not use lids from other mini-cells.

The XCell SureLock® Mini-Cell is designed to meet EN61010-1 Safety Standards. This product is safe to use when operated in accordance with this instruction manual. If this unit is used or modified in a manner not specified in this manual then protection afforded by the unit will be impaired. Alteration of this unit will:

- Void the warranty.
- Void the EN61010-1 safety standard certification.
- Create a potential safety hazard.

Life Technologies is not responsible for any injury or damage caused by use of this unit when operated for purposes which it is not intended. All repairs and service should be performed by Life Technologies.

The XCell SureLock® Mini-Cell is classified as Class II of IEC 536 for protection against electrical shock.

*The XCell SureLock® is rated at 1500 VDC, 75 Watts, but for running protein gels, the maximum voltage/wattage recommended is 500 VDC/50 Watts.

Continued on next page
Safety Information, continued

Symbols on Instrument

The following table describes the symbols displayed on the instrument.

Informational Symbols

The symbols used on the XCell SureLock® Mini-Cell are explained below:

- Used on the XCell SureLock® Mini-Cell to indicate an area where a potential shock hazard may exist.
- Used on the XCell SureLock® Mini-Cell to indicate a warning. The operator’s manual should be consulted to avoid possible personal injury or instrument damage.

- **WEEE** (Waste Electrical and Electronic Equipment) symbol indicates that this product should not be disposed of in unsorted municipal waste. Follow local municipal waste ordinances for proper disposal provisions to reduce the environmental impact of WEEE.

Important

The XCell SureLock® Mini-Cell is manufactured in the USA from domestic and International components.

To ensure safe, reliable operation, always operate the XCell SureLock® Mini-Cell according to instructions provided in this manual. Wear protective gloves and safety glasses when working in a laboratory environment.

Life Technologies products are intended for in vitro use only.

Life Technologies is not responsible for injuries or damages caused by improper use.
Sicherheits-Anweisungen

Die SureLock® Elektrophorese-Zelle muss mit einer geerdeten Gleichstrom-Spannungsquelle betrieben werden, die speziell für die Elektrophorese entwickelt wurde. Um eine Gefährdung des Benutzers auszuschließen, sollten folgende Laufbedingungen eingehalten werden:

Maximale Spannung: 1500 Volt
Maximale Leistung: 75 Watt
Maximale Temperatur: 70°C


Life Technologies haftet nicht für Verletzungen oder Schäden jeglicher Art, wenn die Elektrophorese-Zelle für Anwendungen eingesetzt wird, für die die Zelle nicht entwickelt wurde. Alle Reparaturen und Wartungen müssen von Life Technologies oder einem von Life Technologies autorisierten Händler vorgenommen werden.


Symbolerklärung

Weist auf eine Zone hin, wo Gefährdung durch Stromschlag besteht.

Lesen Sie die Bedienungsanleitung, um Verletzungen oder Beschädigung des Gerätes zu vermeiden.

WEEE (Waste Electrical and Electronic Equipment)
Instructions de sécurité

La Cellule d’Electrophorèse SureLock® doit être uniquement une utilisation avec une alimentation en courant continu DC externe et spécialement conçue pour en électrophorèse. Cette alimentation doit être avec séparation galvanique de façon que la sortie DC du secondaire ai un potentiel électrique flottant. Le domaine d’utilisation de la Celleule d’Electrophorèse SureLock® est limité par les paramètres de fonctionnement suivants:

- Tension maximum: 1,500 V continu
- Puissance maximum: 75 W
- Température maximum: 70°C

La Cellule d’Electrophorèse SureLock® est conçue de façon à ce que lorsque le couvercle de la cuve est ouvert, la connection électrique avec l’unité est interrompue. Il ne faut en aucun cas essayer de faire fonctionner la cuve sans le couvercle.

La Cellule d’Electrophorèse SureLock® satisfait aux normes de sécurité EN 61010-1. La sécurité est assurée dans tous les cas d’une utilisation conforme au manuel d’utilisation. Dans le cas ou la cellule serait modifiée ou utilisée de manière non spécifiée dans le manuel d’utilisation, la sécurité de l’utilisateur pourrait être remise en cause. En cas d’utilisation non conforme toutes les garanties ainsi que les certifications de conformité aux normes de sécurité sont abrogées.

La responsabilité de Life Technologies ne peut être mise en cause en cas d’accident et dommages causés par une utilisation non conforme de la Cellule d’Electrophorèse. Toute intervention de service ou de réparation doit être uniquement effectuée par Life Technologies ou par un agent agréé de Life Technologies.

La Cellule d’Electrophorèse SureLock® est classifié par rapport à la norme d’isolation électrique IEC 536 en classe II.

Signification des pictogrammes

Sur le Cellule d’Electrophorèse XCell SureLock®, signale les zones où un risque de choc électrique peut exister.


WEEE (Waste Electrical and Electronic Equipment)
# Buffers and Running Conditions

**Introduction**

The buffers and running conditions for the different Novex® mini-gels using the XCell SureLock® Mini-Cell are listed below. For ordering information on buffers, see page 20.

<table>
<thead>
<tr>
<th>Gel Type</th>
<th>Sample Buffer</th>
<th>Running Buffer</th>
<th>Power Settings*</th>
<th>Run Time</th>
</tr>
</thead>
</table>
| Tris-Glycine SDS-PAGE         | Tris-Glycine SDS Sample Buffer (LC2676) | Tris-Glycine SDS Running Buffer (LC2675) | Voltage: 125 V Constant  
                          |                                          |                           | Expected Current:  
                          |                                          |                           | Start: 30–40 mA  
                          |                                          |                           | End: 8–12 mA  
                          |                                          |                           | 90 minutes |
| Tris-Glycine SDS-PAGE         | Add NuPAGE® Sample Reducing Agent (NP0004) | Tris-Glycine Native Running Buffer (LC2672) | Voltage: 125V Constant  
                          |                                          |                           | Expected Current:  
                          |                                          |                           | Start: 6–12 mA  
                          |                                          |                           | End: 3–6 mA  
                          |                                          |                           | 1–12 hours |
| Tris-Glycine (Native)         | Tris-Glycine Native Sample Buffer (LC2673) | Tris-Glycine Native Running Buffer (LC2672) | Voltage: 125V Constant  
                          |                                          |                           | Expected Current:  
                          |                                          |                           | Start: 6–12 mA  
                          |                                          |                           | End: 3–6 mA  
                          |                                          |                           | 1–12 hours |
| NuPAGE® Bis-Tris SDS-PAGE     | NuPAGE® LDS Sample Buffer (NP0007)      | NuPAGE® MES SDS Running Buffer (NP0002) or  
                          |                                          |                           | NuPAGE® MOPS SDS Running Buffer (NP0001)  
                          |                                          |                           | Voltage: 200V Constant  
                          |                                          |                           | Expected Current:  
                          |                                          |                           | Start: 110–125 mA  
                          |                                          |                           | End: 70–80 mA  
                          |                                          |                           | 35–50 minutes |
| NuPAGE® Bis-Tris SDS-PAGE     | Add NuPAGE® Sample Reducing Agent (NP0004) to sample buffer | Add NuPAGE® Antioxidant (NP0005) to running buffer |                           |                           | 50 minutes |
| NuPAGE® Tris-Acetate SDS-PAGE | NuPAGE® LDS Sample Buffer (NP0007)      | NuPAGE® Tris-Acetate Running Buffer (LA0041) | Voltage: 150V Constant  
                          |                                          |                           | Expected Current:  
                          |                                          |                           | Start: 40–55 mA  
                          |                                          |                           | End: 25–40 mA  
                          |                                          |                           | 50 minutes |
| NuPAGE® Tris-Acetate SDS-PAGE | Add NuPAGE® Sample Reducing Agent (NP0004) to sample buffer | Add NuPAGE® Antioxidant (NP0005) to running buffer |                           |                           | 50 minutes |

*Current readings are per gel

*Continued on next page*
<table>
<thead>
<tr>
<th>Gel Type</th>
<th>Sample Buffer</th>
<th>Running Buffer</th>
<th>Power Settings*</th>
<th>Run Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tricine SDS-PAGE (denaturing, non-reducing)</td>
<td>Tricine SDS Sample Buffer (LC1676)</td>
<td>Tricine SDS Running Buffer (LC1675)</td>
<td>Voltage: 125V Constant&lt;br&gt;Expected Current: Start: 80 mA&lt;br&gt;End: 40 mA</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Zymogram</td>
<td>Tris-Glycine SDS Sample Buffer (LC2676)</td>
<td>Tris-Glycine SDS Running Buffer (LC2675)</td>
<td>Voltage: 125V Constant&lt;br&gt;Expected Current: Start: 30-40 mA&lt;br&gt;End: 8-12 mA</td>
<td>90 minutes</td>
</tr>
<tr>
<td>IEF pH 3–7</td>
<td>IEF pH 3–7 Sample Buffer (LC5371)</td>
<td>IEF pH 3–7 Cathode Buffer (LC5370)&lt;br&gt;IEF Anode Buffer (LC5300)</td>
<td>Voltage: 100V 1 hour&lt;br&gt;200V 1 hour&lt;br&gt;500V 30 minutes&lt;br&gt;Expected Current: Start: 5 mA&lt;br&gt;End: 6 mA</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>IEF pH 3–10</td>
<td>IEF pH 3–10 Sample Buffer (LC5311)</td>
<td>IEF pH 3–10 Cathode Buffer (LC5310)&lt;br&gt;IEF Anode Buffer (LC5300)</td>
<td>Voltage: 100V 1 hour&lt;br&gt;200V 1 hour&lt;br&gt;500V 30 minutes&lt;br&gt;Expected Current: Start: 5 mA&lt;br&gt;End: 6 mA</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>TBE</td>
<td>Hi-Density TBE Sample Buffer (LC6678)</td>
<td>TBE Running Buffer (LC6675)</td>
<td>Voltage: 200V Constant&lt;br&gt;Expected Current: Start: 10–18 mA&lt;br&gt;End: 4–6 mA</td>
<td>30–90 minutes</td>
</tr>
<tr>
<td>TBE-Urea</td>
<td>TBE-Urea Sample Buffer (LC6876) or Prep TBE-Urea Sample Buffer (LC6877)</td>
<td>TBE Running Buffer (LC6675)</td>
<td>Voltage: 180V Constant&lt;br&gt;Expected Current: Start: 10–20 mA&lt;br&gt;End: 6–14 mA</td>
<td>50–75 minutes</td>
</tr>
<tr>
<td>DNA Retardation</td>
<td>Hi-Density TBE Sample Buffer (LC6678)</td>
<td>TBE Running Buffer (LC6675) at 1/2 X concentration</td>
<td>Voltage: 100V Constant&lt;br&gt;Expected Current: Start: 12–15 mA&lt;br&gt;End: 6–15 mA</td>
<td>90 minutes</td>
</tr>
</tbody>
</table>

*Current readings are per gel
Related Products

### Additional Products

Many of the components of the XCell *SureLock®* Mini-Cell, as well as additional reagents that may be used for electrophoresis of proteins are available separately from Life Technologies. Ordering information is provided below. For details, visit [www.lifetechnologies.com](http://www.lifetechnologies.com) or call Technical Support (page 22).

<table>
<thead>
<tr>
<th>Apparatus</th>
<th>Quantity</th>
<th>Cat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCell <em>SureLock®</em> Mini-Cell</td>
<td>1 kit</td>
<td>EI0001</td>
</tr>
<tr>
<td><em>SureLock®</em> Retrofit Kit for XCell II™ Mini-Cell</td>
<td>1 kit</td>
<td>EI0020</td>
</tr>
<tr>
<td>XCell <em>SureLock®</em> Mini-Cell w/XCell II™ Mini-Cell</td>
<td>1 kit</td>
<td>EI0002</td>
</tr>
<tr>
<td>XCell II™ Blot Module</td>
<td>1 each</td>
<td>EI9051</td>
</tr>
<tr>
<td>PowerEase® 500 Power Supply</td>
<td>1 each</td>
<td>EI8600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Replacement Parts</th>
<th>Quantity</th>
<th>Cat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Buffer Chamber</td>
<td>1 each</td>
<td>EI0013</td>
</tr>
<tr>
<td>XCell <em>SureLock®</em> Wedge</td>
<td>1 each</td>
<td>EI0011</td>
</tr>
<tr>
<td>Gel Knife</td>
<td>1 each</td>
<td>EI9010</td>
</tr>
<tr>
<td>Buffer Core with Electrodes</td>
<td>1 each</td>
<td>EI9014</td>
</tr>
<tr>
<td>XCell <em>SureLock®</em> Lid</td>
<td>1 each</td>
<td>EI0010</td>
</tr>
<tr>
<td>Buffer Dam</td>
<td>1 each</td>
<td>EI0012</td>
</tr>
<tr>
<td>Buffer Core Replacement Wire</td>
<td>2 each</td>
<td>EI9022</td>
</tr>
<tr>
<td>Gaskets (2) for EI0001 and EI9051</td>
<td>2 each</td>
<td>EI9022</td>
</tr>
<tr>
<td>Repair Kit for Buffer Core (includes wire, wire insulation, post, nut washer)</td>
<td>1 Kit</td>
<td>EI9021</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pipette Tips for Gel Loading</th>
<th>Quantity</th>
<th>Cat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gel Loading Tips (Standard Round)</td>
<td>200/pk</td>
<td>LC1001</td>
</tr>
<tr>
<td>Flat Gel Loading Tips</td>
<td>200/pk</td>
<td>LC1002</td>
</tr>
<tr>
<td>Gel Loading Tips (Eppendorf Round)</td>
<td>200/pk</td>
<td>LC1010</td>
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*Continued on next page*
<table>
<thead>
<tr>
<th>Pre-Mixed Buffers</th>
<th>Quantity</th>
<th>Cat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NuPAGE® LDS Sample Buffer (4X)</td>
<td>10 mL</td>
<td>NP0007</td>
</tr>
<tr>
<td>NuPAGE® Sample Reducing Agent (10X)</td>
<td>250 μL</td>
<td>NP0004</td>
</tr>
<tr>
<td></td>
<td>10 mL</td>
<td>NP0009</td>
</tr>
<tr>
<td>NuPAGE® Antioxidant</td>
<td>15 mL</td>
<td>NP0005</td>
</tr>
<tr>
<td>NuPAGE® MOPS SDS Running Buffer (20X)</td>
<td>500 mL</td>
<td>NP0001</td>
</tr>
<tr>
<td>NuPAGE® MES SDS Running Buffer (20X)</td>
<td>500 mL</td>
<td>NP0002</td>
</tr>
<tr>
<td>NuPAGE® Tris-Acetate SDS Running Buffer (20X)</td>
<td>500 mL</td>
<td>LA0041</td>
</tr>
<tr>
<td>NuPAGE® Transfer Buffer (20X)</td>
<td>125 mL</td>
<td>NP0006</td>
</tr>
<tr>
<td>Novex® Tris-Glycine SDS Running Buffer (10X)</td>
<td>500 mL</td>
<td>LC2675</td>
</tr>
<tr>
<td>Novex® Tris-Glycine SDS Sample Buffer (2X)</td>
<td>20 mL</td>
<td>LC2676</td>
</tr>
<tr>
<td>Novex® Tris-Glycine Native Running Buffer (10X)</td>
<td>500 mL</td>
<td>LC2672</td>
</tr>
<tr>
<td>Novex® Tris-Glycine Native Sample Buffer (2X)</td>
<td>20 mL</td>
<td>LC2673</td>
</tr>
<tr>
<td>Novex® Tris-Glycine Transfer Buffer (25X)</td>
<td>500 mL</td>
<td>LC3675</td>
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<tr>
<td>Novex® Tricine SDS Running Buffer (10X)</td>
<td>500 mL</td>
<td>LC1675</td>
</tr>
<tr>
<td>Novex® Tricine SDS Sample Buffer (2X)</td>
<td>20 mL</td>
<td>LC1676</td>
</tr>
<tr>
<td>Novex® IEF Cathode Buffer pH 3–10 (10X)</td>
<td>125 mL</td>
<td>LC5310</td>
</tr>
<tr>
<td>Novex® IEF Cathode Buffer pH 3–7 (10X)</td>
<td>125 mL</td>
<td>LC5370</td>
</tr>
<tr>
<td>Novex® IEF Anode Buffer(50X)</td>
<td>100 mL</td>
<td>LC5300</td>
</tr>
<tr>
<td>Novex® IEF Sample Buffer pH 3–10 (2X)</td>
<td>25 mL</td>
<td>LC5311</td>
</tr>
<tr>
<td>Novex® IEF Sample Buffer pH 3–7 (2X)</td>
<td>25 mL</td>
<td>LC5371</td>
</tr>
<tr>
<td>Novex® TBE Running Buffer (5X)</td>
<td>1 L</td>
<td>LC6675</td>
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<tr>
<td>Novex® Hi-Density TBE Sample Buffer (5X)</td>
<td>10 mL</td>
<td>LC6678</td>
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<tr>
<td>Novex® TBE-Urea Sample Buffer (2X)</td>
<td>10 mL</td>
<td>LC6876</td>
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<tr>
<td>Novex® Zymogram Renaturing Buffer (10X)</td>
<td>500 mL</td>
<td>LC2670</td>
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<tr>
<td>Novex® Zymogram Developing Buffer (10X)</td>
<td>500 mL</td>
<td>LC2671</td>
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</tbody>
</table>
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