

# A Complete Mini-Vertical Electrophoresis System



# **XCell** *SureLock*<sup>™</sup> **offers:**

- Easy set-up
- Leak-free electrophoresis
- Multiple applications



# **Easy** electrophoresis



Electrophoresis doesn't have to be hard.

The XCell *SureLock*™ Novex Mini-Cell employs patented technology to make electrophoresis easier than ever before. With the XCell *SureLock*™ Novex Mini-Cell you'll get:

- Easy set-up-there are no awkward clamps or screws to struggle with
- · Leak-free electrophoresis-gels are positively locked in place
- Trouble-free runs—"incomplete runs" are eliminated, ensuring reproducible results
- One unit that meets all your electrophoresis needs—easily adapted for use with any Novex® pre-cast gel or for any blotting procedure

# Easy set-up procedure

The XCell *SureLock™* Mini-Cell can be easily set up in just three simple steps (Figure 1). The positive-locking gel tension wedge replaces clumsy clamps and devices to save

you time and effort during set-up, guaranteeing consistent electrophoresis results.

Figure 1 – Easy set-up procedure of the XCell SureLock™ Mini-Cell



Drop buffer core into the lower buffer chamber of the XCell <code>SureLock</code>\* Mini-Cell, insert one mini-gel in front of the buffer core and a second mini-gel or the buffer dam behind the buffer core.



Lock the gel tension wedge in place, load samples, and fill the buffer chambers with the appropriate running buffers.



Place the cell lid on the unit and you're ready to run.

Toll Free: 800 955 6288

# How the XCell SureLock™ Mini-Cell works

The XCell SureLock™ Mini-Cell holds gels firmly in place with a simple gel tension wedge. There is no need to struggle with awkward set-up devices such as clamps or screws. The precast gels and buffer core, a U-shaped insert with platinum wire and electrode plugs, are easily placed into the mini-cell lower buffer chamber. Pushing the lever on the gel tension wedge forward into the locked position generates an even

horizontal force that seals the gel/buffer core assembly firmly into position (Figure 2). This forms two separated buffer reservoirs—the upper and lower buffer chambers. The positive locking action of the gel tension wedge ensures a trouble-free, leak-free run every time. Table 1 shows the specifications for the XCell  $SureLock^{TM}$  Mini-Cell.

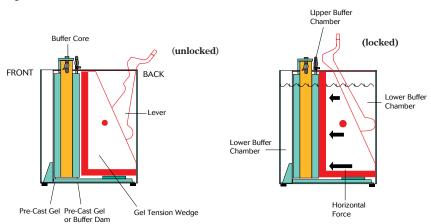


Figure 2 – Side view of the XCell SureLock™ Mini-Cell

Table 1 – Specifications of the XCell SureLock™ Mini-Cell

Specifications			
Gel Capacity:	Up to two Novex* mini-gels or one XCell $\mathrm{II}^{\scriptscriptstyle{\mathrm{TM}}}$ Blot Module		
Cell Dimensions:	12.5 cm (l) x 14.4 cm (w) x 16 cm (h)		
Upper Buffer Chamber Requirement:	200 ml for Novex® mini-gels		
Lower Buffer Chamber Requirement:	600 ml for Novex® mini-gels		
Material:	Polycarbonate		
Chemical Resistance:	The XCell <i>SureLock</i> ™ Mini-Cell is impervious to alcohol but is not compatible with chlorinated hydrocarbons (e.g. chloroform), aromatic hydrocarbons (e.g. toluene, benzene) or acetone.		

# Meets all your electrophoresis needs

The XCell SureLock™ Mini-Cell can be easily converted for use in a variety of electrophoresis applications (Figure 3). The mini-cell buffer core and dam (A) allow you to electrophorese protein or nucleic acid molecules on any Novex® mini-gel\*. In addition, the

XCell II<sup>™</sup> Blot Module (B) can be inserted for blotting mini-gels right in the XCell SureLock™ Mini-Cell. There's no need to spend money purchasing individual units for each application.

Figure 3 – Multiple applications of the XCell SureLock™ Mini-Cell

#### Mini-cell buffer core and dam

For analyzing protein and nucleic acid molecules on a broad range of Novex® mini-gels including PAGE, IEF, and TBE.



The buffer core and dam can be used for

running any Novex® mini-gel in the 10 cm

(w) x 10 cm (h) plastic cassette. The buffer core and dam are included in the XCell SureLock™ Mini-Cell (EI0001).





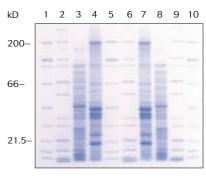
XCell II™ Blot Module For blotting mini-gels in the XCell SureLock\*



The blot module can easily be inserted in the lower buffer chamber of the mini-cell.



### NuPAGE® Novex 4-12% Bis-Tris Gel electrophoresed in the XCell SureLock™ Mini-Cell

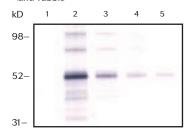


The gel was run with MOPS SDS running buffer for 50 minutes.

Lanes 1,5,10: Bio-Rad Broad Range Standard with NuPAGE® Reducing Agent Lanes 2,6,9: Mark12™ Standard Lanes 3,8: E. coli extract with NuPAGE® Reducing Agent Lanes 4,7: Turkey muscle extract with NuPAGE® Reducing Agent

\* See back page of this brochure for more information on Novex\* mini-gels.

#### Western Blot developed with WesternBreeze® Chromogenic Kit (anti-rabbit)



Samples were run on a NuPAGE® Novex 4-12% Bis-Tris Gel (with MES Buffer) then transferred onto a nitrocellulose membrane using the XCell  $\mathrm{II}^{\scriptscriptstyle\mathsf{TM}}$  Blot Module. NOTE: 10 pg of h-IgG was detected with clear background and no non-specific binding.

Lane 1: Multi-Mark® Standard

Lane 2: 10 ng of Human IgG (h-IgG)

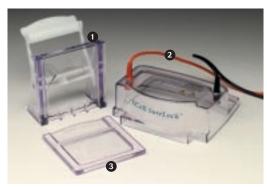
Lane 3: 1 ng of h-IgG Lane 4: 100 pg of h-IgG Lane 5: 10 pg of h-IgG



# Do you already have an XCell II™ Mini-Cell?

If you already have an XCell II<sup>™</sup> Mini-Cell, you can easily upgrade it to the XCell *SureLock*<sup>™</sup> Mini-Cell with a *SureLock* Retrofit Kit. The *SureLock* Retrofit Kit consists of a *SureLock* mini-cell lid, gel tension wedge, and molded mini-gel buffer dam (Figure 4). Simply replace the XCell II<sup>™</sup> cell lid, front wedge, rear wedge, and square plastic dam with the components of the *SureLock* Retrofit Kit to make using the easiest minicell even easier.

Figure 4 – Upgrade Your XCell II<sup>\*</sup> Mini-Cell with the *SureLock* Retrofit Kit



- 1. Gel Tension Wedge
- 2. Cell Lid
- 3. Mini-Gel Buffer Dam

# Pick the kit that fits

The XCell SureLock™ Mini-Cell is available separately or with the XCell II™ Blot Module to fit your electrophoresis needs. Table 2 can help you select the product that best fits your applications.

Table 2 – XCell SureLock™ configurations

Product	Contents	Application	
XCell <i>SureLock</i> ™ Mini-Cell	Cell for mini-gel (including buffer core, lower buffer chamber, lid, gel tension wedge, and dam)	Running Novex® mini-gels	
XCell <i>SureLock</i> ™ Mini-Cell w/ XCell II™ Blot Module Kit	Cell for mini-gel and XCell II <sup>™</sup> Blot Module	Running and blotting mini-gels	
SureLock Retrofit Kit for XCell II™	SureLock Mini-Cell lid, gel tension wedge, and molded buffer dam	Upgrade XCell II <sup>™</sup> Mini-Cell to XCell <i>SureLock</i> <sup>™</sup> Mini-Cell	

# **Simplify** your electrophoresis

For the easiest and most convenient way to perform electrophoresis, choose the XCell *SureLock*™ Mini-Cell. Call Invitrogen and place your order today.

Product	Quantity	Cat. no.	Price
XCell <i>SureLock</i> ™ Mini-Cell	1	EI0001	\$365
XCell II™ Blot Module	1	EI9051	\$250
XCell $\mathit{SureLock}^{\text{\tiny{™}}}$ Mini-Cell and XCell $\mathit{II}^{\text{\tiny{™}}}$ Blot Module	1	EI0002	\$615
SureLock Retrofit Kit for XCell II™ Mini-Cell	1	EI0020	\$145

NuPAGE® is covered by U.S. Patent Nos. 6,162,338; 6,143,154; 6,096,182; 5,922,185; 5,578,180; EP0753142 and corresponding patents in other countries. For research purposes only. The XCell Surelock® Mini-Cell is covered by U.S. Patent No. 6,001,233. For research purposes only.

# Novex® Pre-Cast Gels Meet All of Your Electrophoresis Needs

Invitrogen offers a large selection of mini-gels to suit all of your protein and nucleic acid separation needs. All Novex\* mini-gels can be used in the XCell  $SureLock^*$  Mini-Cell and are guaranteed to achieve optimal resolution.

## NuPAGE® high-performance gels for protein separations

NuPAGE® Novex Gels employ a patented neutral pH electrophoresis technology that offers significant advantages over traditional Laemmli-style SDS-PAGE gel. You'll get:

- 12-month shelf life
- Excellent resolution time after time
- Efficient transfers
- Fast run times (35-50 minutes)

## Novex® Tris-Glycine gels for protein analysis

Novex® pre-cast Tris-Glycine gels are the traditional Laemmli-style gels for protein separations. With the Novex® pre-cast Tris-Glycine gels, you'll get:

- Consistent gel performance—no lot-to-lot variations
- A wide variety of single percentage and gradient gels to meet all your needs
- A choice of 8 different well formats and 2 gel thickness to meet your sample volume requirements

# Novex® IEF gels for determining isoelectric point

Novex® pre-cast vertical isoelectric focusing (IEF) gels allow you to easily and conveniently separate soluble proteins based on their isoelectric point (pI). The Novex® IEF gels provide:

- Excellent resolution for native proteins based on their isoelectric point
- Shortest IEF protocol available and no pre-focusing required
- Broad (pH 3-10) and narrow (pH 3-7) range gels to meet your needs

## More selections available

Novex® Zymogram gels for protease detection and Tricine gels for protein separation, and TBE and TBE-Urea gels for nucleic acid analysis are also available.

For ordering information, check out our web site at www.invitrogen.com



B-04G01-0404 052201