QUICK REFERENCE

Novex® ZOOM® Gels

Pub. Part No. IM-6008 MAN0005887 Rev. Date 20 December 2011

Instructions are provided below for electrophoresis of ZOOM® Gels using the XCell *SureLock*® Mini-Cell. For details, refer to the Novex® Technical Guide available at www.lifetechnologies.com/manuals or contact Technical Support.

ZOOM® Gels

ZOOM® Gels are used for two-dimensional (2D) analysis of proteins following isoelectric focusing (IEF) of 7.0 cm IPG strips. ZOOM® Gels contain an IPG well and a molecular weight marker-well. The IPG well is designed to accommodate a 7.0 cm IPG strip.

Before Starting

1. Dilute 4X NuPAGE® LDS Sample Buffer to 1X with deionized water.
2. To prepare Reducing Solution, add 500 µL NuPAGE® Sample Reducing Agent (10X) to 4.5 mL 1X NuPAGE® LDS Sample Buffer from step 1. Prepare 5–15 mL solution per equilibration tray.
3. To prepare 125 mM Alkylating Solution, dissolve 116 mg iodoacetamide in 5 mL 1X NuPAGE® LDS Sample Buffer from step 1. Prepare 5–15 mL solution per equilibration tray.

Equilibrate IPG Strip

1. Attach one ZOOM® Equilibration Tray to the ZOOM® Cassette containing the IPG strips as described in the guide.
2. Add 5–15 mL Reducing Solution (above) through the spout on the tray. Incubate for 15 minutes at room temperature. Decant the solution using the spouts on the tray.
3. Add 5–15 mL Alkylating Solution (above) to the tray. Incubate for 15 minutes at room temperature. Decant the Alkylating Solution.

Novex® ZOOM® Gels

SDS-PAGE

1. Prepare 0.5% agarose solution in the appropriate running buffer.
2. Cut the plastic ends of the IPG strip flush with the gel.
3. Peel off the tape covering the slot on the back of the ZOOM® Gel. Rinse the well with 1X Running Buffer. Slide the IPG strip into the ZOOM® Gel well.
4. Align the IPG strip properly in the ZOOM® Gel well using a thin plastic ruler or spatula. Avoid introducing air bubbles.
5. Add ~400 µL 0.5% agarose solution into the ZOOM® Gel well containing the IPG strip.
6. Assemble the gel cassette/Buffer Core sandwich assembly of the XCell *SureLock*® Mini-Cell.
7. Fill the Upper and Lower Buffer Chambers with the appropriate 1X Running Buffers.
8. Load molecular weight standards in the marker well.
9. Place the XCell *SureLock*® Mini-Cell lid on the Buffer Core, then connect the electrode cords to the power supply.
10. Perform SDS-PAGE at 200 V for 40 minutes for Novex® NuPAGE® Bis-Tris ZOOM® Gel or at 125 V for 90 minutes for Novex® Tris-Glycine ZOOM® Gel.
11. At the end of electrophoresis, turn off the power and disassemble the XCell *SureLock*® Mini-Cell.
12. Proceed to gel staining and/or mass spectrometry analysis.