

Instructions are provided below for electrophoresis of Novex™ Zymogram Plus Gels using the XCell SureLock™ Mini-Cell or Mini Gel Tank. For details, contact Technical Support.

### Prepare Samples

Reagent	Sample
Sample	x $\mu$ L
Tris-Glycine SDS Sample Buffer (2X)	5 $\mu$ L
Deionized Water	to 10 $\mu$ L final

**Do not heat or reduce samples for Zymogram gels.**

### Prepare 1X Buffer

**1X Tris-Glycine SDS Running Buffer:** Add 100 mL 10X Tris-Glycine SDS Running Buffer to 900 mL deionized water.

### Load Sample

Load the appropriate concentration and volume of your protein on the gel.

### Add Buffer

Fill the Upper Buffer Chamber with 200 mL, and the Lower Buffer Chamber with 600 mL of 1X Tris-Glycine SDS Running Buffer.

### Run Conditions

#### XCell SureLock™ Mini-Cell

Voltage: 125 V constant  
 Run Time: 105 minutes  
 Expected Current: 30 mA/gel (start); 13 mA/gel (end)

#### Mini Gel Tank

Voltage: 125 V constant  
 Run Time: 85 minutes  
 Expected Current: 37 mA/gel (start); 14 mA/gel (end)

**Note:** Run times and currents may vary depending on power supply.

# Novex™ Zymogram Plus Gels

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## Develop Gel

1. Dilute Novex™ Zymogram Renaturing Buffer (10X) and Novex™ Zymogram Developing Buffer (10X) 1:9 with deionized water. Prepare 100 mL of each 1X buffer per 1–2 mini-gels.
  2. After electrophoresis, incubate the gel in 1X Zymogram Renaturing Buffer for 30 minutes at room temperature with gentle agitation.
  3. Decant Zymogram Renaturing Buffer and add 1X Zymogram Developing Buffer to the gel.
  4. Equilibrate the gel for 30 minutes at room temperature with gentle agitation.
  5. Decant buffer and add fresh 1X Zymogram Developing Buffer to the gel.
  6. Incubate the gel at 37°C for at least 4 hours or overnight for maximum sensitivity. Optimize results empirically by varying the sample load or incubation time.
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## Stain Gel

Stain the gels with the Colloidal Blue Staining Kit (Cat. No. LC6025) or the SimplyBlue™ Safestain (Cat. No. LC6060). Areas of protease activity appear as clear bands against a dark background.

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## Sensitivity Level

10% Novex™ Zymogram Plus (Gelatin) Gel:

10<sup>-6</sup> units of collagenase

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