# Tricine Mini Gels

**Package Contents**

| Product | Quantity |
|---|---|
| 10% Tricine Gels | Box of 10 gels |
| 16% Tricine Gels | Box of 10 gels |
| 10–20% Tricine Gels | Box of 10 gels |

**Storage Conditions**

- Store at 2–8°C for a 4 to 8-week shelf life, depending on gel type.
- Do not freeze.

**Required Materials**

- Protein sample and standard
- Tricine SDS Running Buffer (10X)
- Tricine SDS Sample Buffer (2X)
- NuPAGE® Sample Reducing Agent (10X)
- Novex® Power Supply Adapters (Cat. no. ZA10001) if not using a Life Technologies™ power supply
- XCell *SureLock*™ Mini-Cell gel running tank

**Timing**

Run Time: ~90 minutes (depending on gel percentage)

Voltage: 125 V constant

**Selection Guide**

Specialized Protein Gels
Go online to view related products.

**Product Description**

Tricine Gels are precast polyacrylamide gels designed for optimal separation and resolution of low molecular weight proteins and peptides (2–200 kDa) under denaturing gel electrophoresis conditions.

Tricine Mini Gels are available in the following variations:

- **Polyacrylamide percentages**: 10%, 16%, and 10–20%
- **Well formats**: 5, 10, 12, 15, and 1D wells
- **Thickness**: 1.0 mm

**Important Guidelines**

- This system is designed for use in the XCell *SureLock*® Mini-Cell gel running tank.

**Online Resources**

Visit our product page for additional information and protocols. For support, visit www.lifetechnologies.com/support.

For Research Use Only. Not for use in diagnostic procedures.

novex® by life technologies™

Print Options

## Protocol Outline

A. Prepare samples, buffers, and gels.
B. Assemble the gel apparatus.
C. Load buffer, samples, and standards.
D. Perform electrophoresis.

## Electrophoresis Protocol

See page page 2 to view a procedure for preparing and running your electrophoresis experiment.

## Choosing the Right Gel Type for Your Application

Review the table in the pop-up to determine the best gel type for your experiment.

## Choosing the Right Gel Percentage and Buffer

Refer to the migration chart in the pop-up to find the gel best suited for your application. As a general rule, your proteins of interest should migrate through ~70% of the length of the gel for the best resolution. When protein molecular weights are wide ranging or unknown, gradient gels are usually the best choice.

## Choosing a Well Format and Gel Thickness

We offer polyacrylamide gels in a choice of nine well formats and two thicknesses, depending on the gel type. When loading large samples (>30 µL), a thicker gel with fewer wells is more appropriate; Bolt™ Bis-Tris Plus gels are the best choice when loading large samples. When blotting, however, proteins will transfer more easily from a thinner gel.

## Choosing a Protein Standard for your Application

Choose a Life Technologies™ standard based on your experiment:

**Pre-stained:** SeeBlue® Plus2 Pre-Stained Standard or Novex® Sharp Pre-Stained Standard

**Unstained:** Novex® Sharp Unstained Protein Standard or Mark12™ Unstained Standard

**Western:** MagicMark™ XP Western Protein Standard

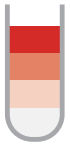
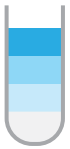
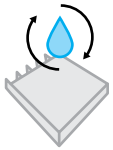
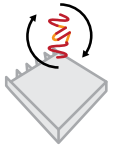
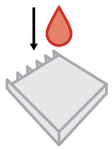
For all other specialty standards, please view further information here.

## Limited Product Warranty and Disclaimer Details

life technologies™

# Tricine Mini Gel Electrophoresis Protocol

Follow the procedure below to prepare for and perform SDS polyacrylamide gel electrophoresis using Tricine Mini Gels.

| Timeline | Steps | Procedure Details |
|---|---|---|
| 1  | **Prepare samples** | **Components** / **Reduced Sample** / **Non-Reduced Sample**<br>Sample: x µL / x µL<br>Tricine SDS Sample Buffer (2X): 5 µL / 5 µL<br>NuPAGE® Reducing Agent (10X): 1 µL / --<br>Deionized Water: to 4 µL / to 5 µL<br>Total Volume: 10 µL / 10 µL<br>Heat at 85°C for 2 minutes.<br>Prepare 1X Sample Buffer for dilutions of samples, if needed. |
| 2  | **Prepare buffers** | Add 100 mL of 10X Tricine SDS Running Buffer to 900 mL of deionized water to prepare 1X Tricine SDS Running Buffer. |
| 3  | **Prepare gels** | a. Remove the comb, and rinse the gel wells three times using 1X Running Buffer.<br>b. Remove the white tape near the bottom of the gel cassettes.<br>c. Place the gels in the XCell *SureLock*® Mini-Cell gel running tank.<br>d. Fill the gel wells with 1X Running Buffer. |
| 4  | **Load samples and standards** | Load the appropriate volume and protein mass of your sample on the gel.<br>Then, load your standards. |
| 5  | **Load buffers** | Fill the Upper (200 mL) and Lower (600 mL) Buffer Chambers with 1X Running Buffer. |
| 6  | **Run** | **Note:** If you are not using a Life Technologies™ power supply, install the Novex® Power Supply Adapters (Catalog number ZA10001).<br>Run for ~90 minutes (depending on gel percentage and electrophoresis device) at 125 V constant. |