



YamayBio

Stain-Free Bis-Tris

Precast Gels

QUICK START MANUAL

For research use only.
Not for use in diagnostic procedures.

Contents and Storage

Product	Cat. No.	Quantity
Stain-Free Bis-Tris Precast Gels, 8%, 12 wells	AN9321-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 8%, 15 wells	AN9351-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 10%, 12 wells	AN9322-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 10%, 15 wells	AN9352-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 12%, 12 wells	AN9323-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 12%, 15 wells	AN9353-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 4~12%, 12 wells	AN9324-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 4~12%, 15 wells	AN9354-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 4~20%, 12 wells	AN9325-10	10 Pieces /Box
Stain-Free Bis-Tris Precast Gels, 4~20%, 15 wells	AN9355-10	10 Pieces /Box

Storage: Store at 4°C for 12 months. The product is shipped at 4°C.
To prevent cracking, please store the gel above 0°C

Introduction

Stain-Free Bis-Tris Precast Gels are a safe, fast, and high-performance precast polyacrylamide gel designed for protein separation.

Stain-Free Bis-Tris gels offer a non-destructive method for protein visualization using UV (302 nm) light, eliminating the need for staining. Its sensitivity is comparable to Coomassie stain. The neutral pH of the gel significantly enhances gel stability and effectively prevents protein remodification during electrophoresis. The colored stacking gel provides a clear visual reference for precise sample loading, ensuring accurate and consistent results.

Gel dimensions (W x L x thickness): 8 x 7 x 0.1 cm

Cassette dimensions (W x L x thickness): 10.0 x 8 x 0.47 cm

Compatible with Bio-Rad systems; if using a Thermo system, please use the included spacers.

Quick Start Protocol

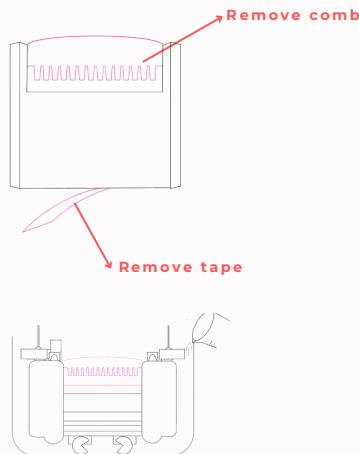
Preparation:



The U-shaped gasket in the electrode assembly module has two sides: one flat and one convex.

- For precast gel, ensure the **flat side** faces outward
- For handcast gels, ensure the convex side faces outward

Instructions for using precast gels:

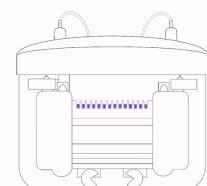


1. **Remove Comb:** Position your thumb at the center of the comb and lift it straight up to remove.

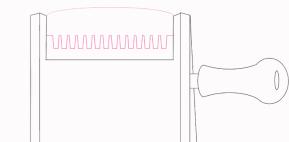
2. **Remove Tape:** Pull the pink tape gently to remove it from the bottom of the cassette.

3. **Assemble the Cell:** Assemble the cassette into the running module of the Bis-Tris system. Add Tris/MOPS/SDS running buffer (MS8132) to the inner and outer chambers. Use a disposable transfer pipette to rinse the wells with running buffer.

4. **Run Gel:** Prepare the samples and load them into the wells. If using YamayBio Tricolor Prestained Protein Ladder, load 5 μ L. Run the gel until the dye front reaches the bottom of the gel. The recommended running conditions for the gel are 140 V for 40 minutes. After complete electrophoresis, turn off the power supply and disconnect the electrical leads.



5. **Open Cassette:** Remove the lid from the tank and pour off and discard the upper running buffer. Remove the gel from the buffer chamber. Align the tip of the opening lever with the small cylinder on the cassette. Insert the lever between the cassette plates and apply downward pressure to break the seal. Gently pull the two plates apart, starting from the top of the cassette.



6. **Remove Gel:** Gently remove the gel from the cassette. Protein bands can be visualized using UV imaging at 302 nm.



Note: For Stain-Free gels, activate the gel in a compatible imager at this point.

Loading Volume

Well type	Maximum loading volume
12 well	35 µL
15 well	25 µL

Recommended Running Condition

Power conditions: 140 V

Run time: 40 min

Recommended Buffers

PRODUCT	CAT. NO.	QUANTITY
Tris/MOPS/SDS Buffer Instant Granules	MS8132	10 sticks (500 mL × 10)
Transfer Buffer Instant Granules	MS8134	10 sticks (1.2 L × 10)
Ice-free Bath Rapid Transfer Buffer Instant Granules	MS8135	10 sticks (1.2 L × 10)