

Precast Protein Gel (Tris-Gly), 1.0mm – Instruction Manual

Catalogue Information

Catalogue No.	Product Name	Pack Size
BL1000A	Tris-Gly Precast Protein Gel, 10%, 15-well	10 Gels
BL1001A	Tris-Gly Precast Protein Gel, 12%, 10-well	10 Gels
BL1002A	Tris-Gly Precast Protein Gel, 12%, 15-well	10 Gels
BL1003A	Tris-Gly Precast Protein Gel, 15%, 10-well	10 Gels
BL1004A	Tris-Gly Precast Protein Gel, 15%, 15-well	10 Gels
BL1005A	Tris-Gly Precast Protein Gel, 4-15%, 10-well	10 Gels
BL1006A	Tris-Gly Precast Protein Gel, 4-15%, 15-well	10 Gels
BL1007A	Tris-Gly Precast Protein Gel, 4-20%, 10-well	10 Gels
BL1008A	Tris-Gly Precast Protein Gel, 4-20%, 15-well	10 Gels
BL1009A	Tris-Gly Precast Protein Gel, 10%, 10-well	10 Gels
BL1391A	Tris-Gly Precast Protein Gel, 8-16%, 10-well	10 Gels
BL1392A	Tris-Gly Precast Protein Gel, 8-16%, 15-well	10 Gels

Product Description

Biosharp Precast Protein Gel (Tris-Gly) is a safe, fast, and high-performance precast polyacrylamide gel, commonly used for PAGE and Western blot applications. It provides sharp and straight bands, features high-capacity wells for easy sample loading, and is suitable for both denaturing (SDS-PAGE) and non-denaturing (Native-PAGE) electrophoresis.

Product Feature

1. Versatile use: Gel does not contain SDS, can be applied to denaturing or non-denaturing PAGE.
2. Stable performance: Automated gel casting ensures reproducibility and stability.
3. Plastic cassette: Reduces nonspecific adsorption, yielding sharper bands.
4. Time-saving: Electrophoresis can be completed in ~60 minutes at 180 V.
5. Easy handling: Cassette can be easily opened with gel opener tools.
6. Variety: Available in uniform gels (6%, 8%, 10%, 12%, 15%) and gradient gels (4–15%, 4–20%).
7. Broad compatibility: Fits most mini-gel electrophoresis tanks (Bio-Rad, Tianneng, Junyi, etc.).

Specification

Parameter	Value
Cassette Size (W×H×T)	100 × 89 × 4.8 mm
Gel Size (W×H×T)	84 × 74 × 1.0 mm
Gel Thickness	1.0 mm
Stacking Gel	4%, 1.5 cm
Separating Gel	Varies, 5.9 cm
Buffer System	Tris-Gly system
Max Sample Volume	30 µL per well, 15-well 50 µL per well, 10-well

Instructions for Use

Native-PAGE

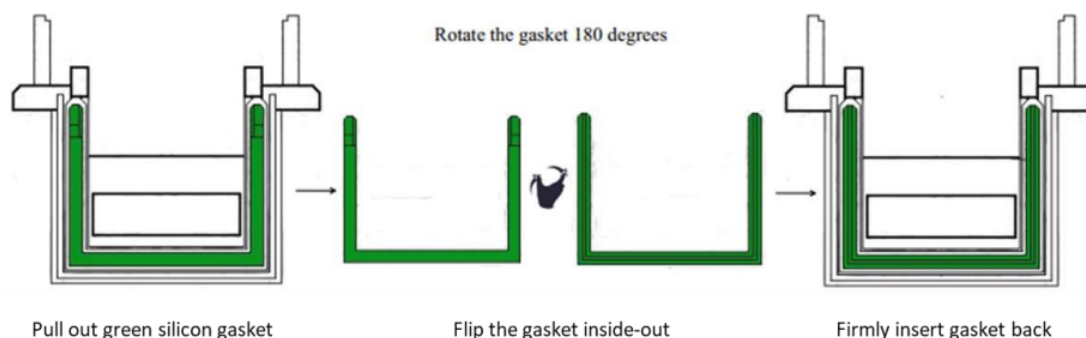
1. Remove gel from package; **peel off sealing tape** at the bottom.
2. Place gel into electrophoresis tank.
3. Prepare Native-PAGE buffer.
4. Fill inner chamber completely with buffer; outer chamber $\geq 1/3$ full. Carefully remove comb.
5. Flush wells with buffer using pipette to remove residual gel.
6. Mix protein sample with Native sample buffer. Load carefully without puncturing wells.
7. Electrophorese at 180 V for ~60 min until dye front reaches bottom.
8. Remove gel: open cassette carefully using gel opener tool.

** SDS-PAGE **

1. Remove gel from package; **peel off sealing tape** at the bottom.
2. Place gel into electrophoresis tank.
3. Prepare SDS-PAGE running buffer.
4. Fill inner chamber completely with buffer; outer chamber $\geq 1/3$ full. Carefully remove comb.
5. Flush wells with buffer using pipette to remove residual gel.
6. Mix protein sample with SDS loading buffer; heat to denature before loading.
7. Electrophorese at 180 V for ~60 min until dye front reaches bottom.
8. Remove gel: open cassette carefully using gel opener tool.

Modification required to switch from handcast to precast electrophoresis tanks (Bio-Rad, AperBio)

1. Manual modification is required on the silicone gasket of the electrode inner core/s to ensure that the precast gels fits firmly to the core.
2. Pull up the U-shaped silicone gasket as shown in the picture below.
3. Flip the gasket inside-out so that the flat-side of the gasket is now facing outwards. This will allow a seamless contact between the gasket and the precast gel, and prevents leakage



Notes

- ⚠ Tris-Gly buffer system is neutral.
- ⚠ For sharper bands, reduce voltage to 150 V and extend run time.
- ⚠ At 180 V: current $\approx$ 75 mA (1 gel), 150 mA (2 gels). Current decreases over time.
- ⚠ Do not reuse electrophoresis buffer after a run.
- ⚠ For wet transfer: 120 V, 60–90 min. Adjust based on pre-stained marker performance.
- ⚠ Protein size, gel concentration, and methanol content of transfer buffer affect efficiency.
- ⚠ Cassette design is compatible with Bio-Rad and most other mini-tanks; see manual for setup tips.
- ⚠ For research use only (RUO). Not for diagnostic or therapeutic use.
- ⚠ Wear lab coat and gloves during handling.

Storage and Stability

1. Transport at room temperature. Store in cool place, avoid sunlight and temperature fluctuations.
2. Store 4–8 °C for up to 6 months.
3. Do not store below 0 °C (freezing damages gel).

Notice

For in vitro research use only, not for diagnostic or therapeutic use. This product is not a medical device.

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