

# UltraPAGE Precast Protein Gel

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## 1. Product Description

ACE proudly introduces the new UltraPAGE Precast Protein Gel, a high-quality, high-performance polyacrylamide gel. Featuring a Bis-Tris buffer system, it offers superior buffering capacity compared to conventional Tris-Glycine systems. UltraPAGE gels are compatible with both MOPS and MES running buffers (refer to the Separation Range Table for buffer selection), enabling highly efficient and reliable protein separation while facilitating downstream applications such as Coomassie staining and Western blotting. UltraPAGE gels are available in multiple formats, including gradient gels (4–12%) and fixed concentrations (8%, 10%, 12%), to meet diverse experimental needs.

Cassette dimensions (L × W × H): 100 × 100 × 6.6 mm

Gel dimensions (L × W × Thickness): 80 × 80 × 1.0 mm

Product Advantages:

- ① Broad compatibility: Compatible with both MOPS and MES running buffers, offering a broader separation range.
- ② Enhanced resolution for small proteins: MES buffer provides superior separation of low molecular weight proteins.
- ③ Outstanding resolution: Extended migration distance produces sharp, straight bands with exceptional resolution.
- ④ Ready-to-use: Precast format eliminates solution preparation and gel casting, saving valuable time.
- ⑤ Safe and reliable: No need for handling toxic or hazardous reagents.
- ⑥ High resolution: Achieves clear, uniform, and well-defined protein bands.
- ⑦ Consistent results : Automated large-scale manufacturing ensures excellent gel-to-gel reproducibility and stable quality.

## 2. Gel Separation Range

8%		10%		12%		4-12%	
MOPS	MES	MOPS	MES	MOPS	MES	MOPS	MES
270 kDa	200 kDa	200 kDa	200 kDa	200 kDa	200 kDa	200 kDa	200 kDa
200 kDa	150 kDa	150 kDa	150 kDa	150 kDa	150 kDa	150 kDa	150 kDa
150 kDa	120 kDa	120 kDa	120 kDa	120 kDa	120 kDa	120 kDa	120 kDa
120 kDa	100 kDa	100 kDa	100 kDa	100 kDa	100 kDa	100 kDa	100 kDa
100 kDa	85 kDa	85 kDa	85 kDa	85 kDa	85 kDa	85 kDa	85 kDa
85 kDa	70 kDa	70 kDa	70 kDa	70 kDa	70 kDa	70 kDa	70 kDa
70 kDa	60 kDa	60 kDa	60 kDa	60 kDa	60 kDa	60 kDa	60 kDa
60 kDa	50 kDa	50 kDa	50 kDa	50 kDa	50 kDa	50 kDa	50 kDa
50 kDa	40 kDa	40 kDa	40 kDa	40 kDa	40 kDa	40 kDa	40 kDa
40 kDa	30 kDa	30 kDa	30 kDa	30 kDa	30 kDa	30 kDa	30 kDa
30 kDa	25 kDa	25 kDa	25 kDa	25 kDa	25 kDa	25 kDa	25 kDa
25 kDa	20 kDa	20 kDa	20 kDa	20 kDa	20 kDa	20 kDa	20 kDa
20 kDa	15 kDa	15 kDa	15 kDa	15 kDa	15 kDa	15 kDa	15 kDa
15 kDa	10 kDa	10 kDa	10 kDa	10 kDa	10 kDa	10 kDa	10 kDa
				5 kDa	5 kDa	5 kDa	5 kDa

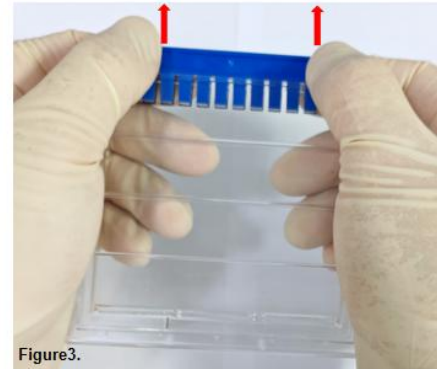
### 3. Operation Procedure

3.1 Dissolve one pack of electrophoresis buffer powder completely in 1 L of deionized water. The prepared buffer is ready for immediate use.

3.2 Remove the precast protein gel from its package and peel off the sealing strip at the side opening (Figure 1).

3.3 Lift the left, right, and middle sections of the comb slightly upwards in sequence to gently separate the comb from the gel(Figure 2).

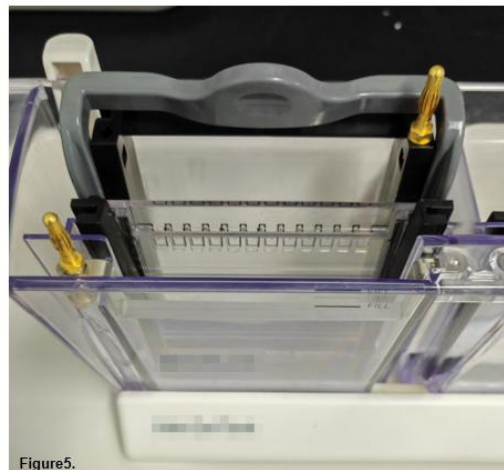
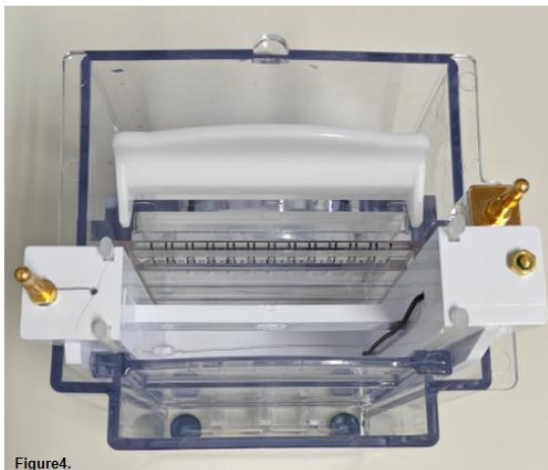
3.4 Push the comb smoothly out of the gel plate according to the direction of the arrow( Figure 3).



3.5 When removing the comb, avoid leaving residual liquid in the sample wells.

3.6 Install the prepared gel plate into the electrophoresis apparatus following the manufacturer's instructions (Figures 4 and 5).

Use a syringe or other tools to rinse the wells with 1× running buffer and remove the bubbles and residual storage buffer.



3.7 Use a pipette to draw up the prepared protein samples. Insert the pipette tip vertically into the wells and load the samples..

3.8 After loading the samples, cover the tank with its lid, connect it to the power supply, and start electrophoresis. The recommended running conditions are 160 V for 45–60 minutes.

3.9 Remove the gel from the plate:

- ① Once electrophoresis is complete, remove the gel plate from the apparatus.
- ② Insert the opener carefully into the gap between the two plates.
- ③ Gently pry open the top, middle, and bottom of one side in sequence (Figure 6).



Figure6.

④ Repeat this operation on all three sides until the plates are completely separated (Figure 7).

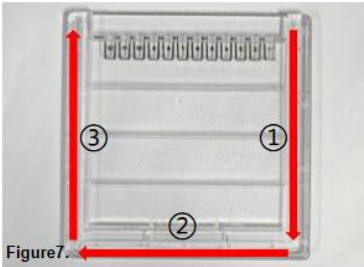


Figure7.

⑤ After opening, the gel may remain on either side of the cassette. Remove and discard the empty plate. Trim off the protruding gel at the lower edge (Figure 8). Submerge the gel-bearing plate in water, tilt gently, and lift so the gel releases into the water. Retrieve the gel for staining or subsequent experiments.

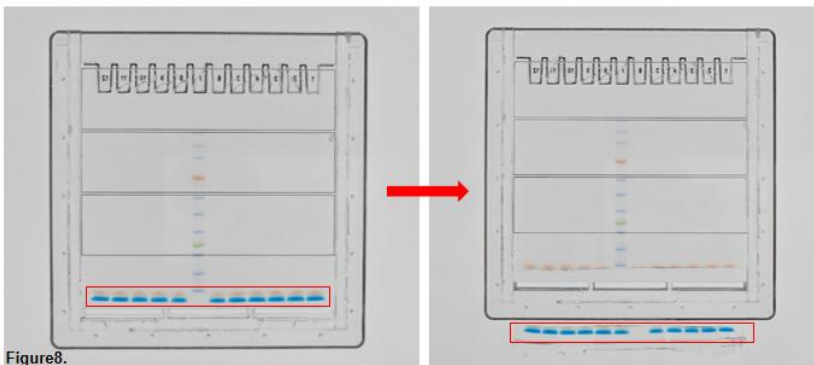


Figure8.

## 4. Precautions

- 4.1 The sealing strip at the side opening of the gel cassette must be removed before use. Failure to do so may interfere with electrophoresis.
- 4.2 When removing the comb, avoid leaving residual liquid or air bubbles in the wells. To ensure clean wells, gently rinse with 1× running buffer using a syringe or similar tool.
- 4.3 Use the recommended MOPS/MES-SDS running buffer. Do not use Tris-Glycine buffer, as it is incompatible with the UltraPAGE precast gel system. The same running buffer should not be reused more than three times.
- 4.4 The recommended running conditions are 160 V for 45-60 minutes. The actual run time may vary depending on factors such as buffer usage frequency and gel concentration, and should be adjusted as needed.
- 4.5 After opening the cassette, the gel may adhere to either side. Immerse the gel-bearing cassette into water, align it parallel with the water surface, then gently tilt and lift until the gel detaches and sinks into the water.
- 4.6 Store the product at 2–8 °C. Shelf life is 12 months. Do not store below 0 °C.
- 4.7 For your safety and health, please wear a lab coat, disposable gloves, and a mask during operation.
- 4.8 This product is for research use only . Do not use for clinical diagnosis.

**5.Related Products**

<b>Product</b>	<b>Cat.No.</b>	<b>Size</b>
UltraPAGE 8% 10 Wells	UL10008Gel	10 PCs/Box
UltraPAGE 8% 12 Wells	UL12008Gel	10 PCs/Box
UltraPAGE 8% 15 Wells	UL15008Gel	10 PCs/Box
UltraPAGE 8% 17 Wells	UL17008Gel	10 PCs/Box
UltraPAGE 10% 10 Wells	UL10010Gel	10 PCs/Box
UltraPAGE 10% 12 Wells	UL12010Gel	10 PCs/Box
UltraPAGE 10% 15 Wells	UL15010Gel	10 PCs/Box
UltraPAGE 10% 17 Wells	UL17010Gel	10 PCs/Box
UltraPAGE 12% 10 Wells	UL10012Gel	10 PCs/Box
UltraPAGE 12% 12 Wells	UL12012Gel	10 PCs/Box
UltraPAGE 12% 15 Wells	UL15012Gel	10 PCs/Box
UltraPAGE 12% 17 Wells	UL17012Gel	10 PCs/Box
UltraPAGE 4-12% 10 Wells	UL10412Gel	10 PCs/Box
UltraPAGE 4-12% 12 Wells	UL12412Gel	10 PCs/Box
UltraPAGE 4-12% 15 Wells	UL15412Gel	10 PCs/Box
UltraPAGE 4-12% 17 Wells	UL17412Gel	10 PCs/Box