SmartPAGE™ Precast Protein Gel Plus

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1. Product Description

SmartPAGE™ Precast Protein Gel Plus are polyacrylamide electrophoresis gels designed to separate a wide range of protein sizes by electrophoresis. **SmartPAGE™ Precast Protein Gel Plus** are available in 12wells and 15wells formats. The gels have the large loading volumes. Automatic gel casting technology provide excellent batch to batch consistency and higher quality. The unique gel buffer formula makes the protein electrophoresis strips sharper and higher resolution. The neutral pH of the buffer avoids the re-modification of proteins during electrophoresis and improves the stability of the gels. **SmartPAGE™Precast Protein Gels Plus** have the following advantages compared with the traditional lab-prepared gels:

- Easy to use: Ready to use, save the time.
- Safe and reliable: Don't need to contact with toxic reagents.
- High compatibility: Suitable for many versions of the electrophoresis tank.
- The experimental results are accurate and repeatable: Automatic gel casting technology provide excellent batch to batch consistency and higher quality.

2. Operation Procedure

2.1 Take the precast protein gels out of the package and remove the pink tape at the bottom of the gel plate (see Figure 1)

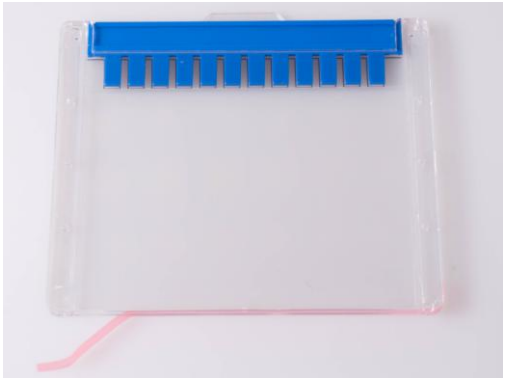


Figure1. Remove the pink tape at the bottom of the gel plate.

2.2 Push the comb smoothly out of the gel plate according to the direction of the arrow (see Figure 2)

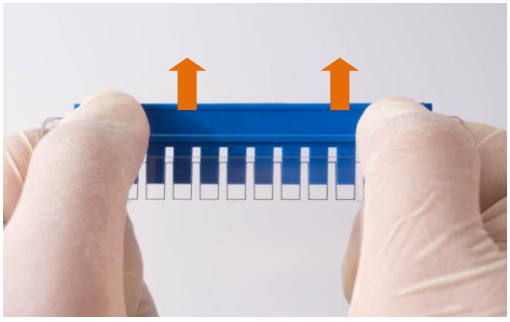


Figure.2 Remove the comb from the gel plate.

2.3 Insert the gel plate into the gel electrophoresis apparatus (see Figure 3)

Figure 3. Insert the gel plate into the gel electrophoresis apparatus.

2.4 Complete the installation according to the apparatus manufacturer's instructions (see Figure 4). Pour enough appropriate buffer into the inner tank of the apparatus to cover the wells by 5-7 mm. Add the same buffer into the outer tank to ensure proper cooling. For best results, the buffer in the outer tank needs to be slightly lower than that in the inner tank, and should not over the plates.

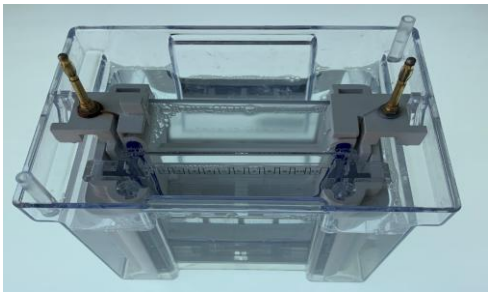


Figure 4. Complete all the installation.

2.5 Use a syringe or other tools to rinse the wells with 1× electrophoretic buffer and remove the bubbles and residual storage buffer. Load the protein sample into the wells and start electrophoresis.

2.6 Remove the gel from the plate (see Figure 5)

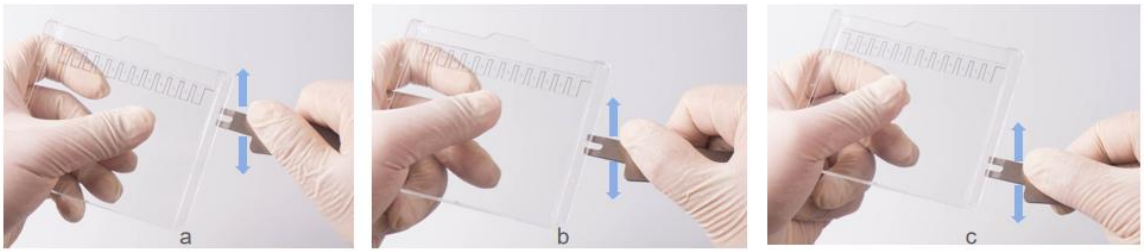


Figure 5. Open the gel cassette with an opener.

① Once the electrophoresis is finished, remove the gel plate from the apparatus.

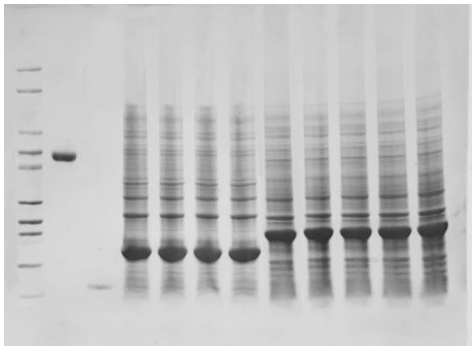
② Open the gel cassette by carefully inserting the opener into the gap between the two plates.

③ Wiggle the opener up and down gently and repeat the operations until the two plates are completely separated.

④ Upon opening, gel may sit on either side of the cassette. Remove and discard the plate without the gel, and loosen the gel from the other plate with water and gently remove.

2.7 Staining or protein transfer according to the experimental requirements.

3. Date Display



Recommended Electrophoresis Conditions:

Voltage: 160V

Running Buffer: MOPS Running Buffer : 50mM Tris，50mM MOPS，0.1% SDS，1mM EDTA，PH=7.7

Staining Method: Coomassie staining

Figure 6. The result of the **SmartPAGE™ Precast Protein Gel Plus (4-20%)**

4. Gel Separation Range

Different concentrations of gels have different separation ranges. The detailed data is shown in Figure 6.

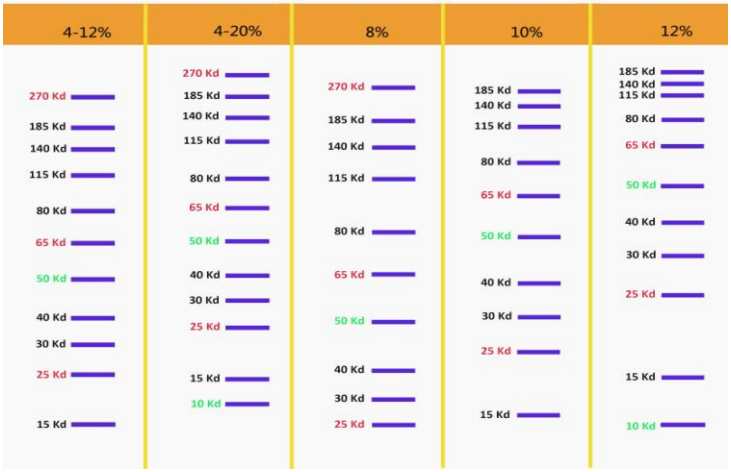


Figure 6. The protein separation range of the different gels.

5. Related Products

Product	Cat. No.	Size
SmartPAGE™ Precast Protein Gel Plus 12Wells	SLE014	4-12%,Bis-Tris
	SLE015	4-20%,Bis-Tris
	SLE016	8%,Bis-Tris
	SLE017	10%,Bis-Tris
	SLE018	12%,Bis-Tris
SmartPAGE™ Precast Protein Gel Plus 15Wells	SLE019	4-12%,Bis-Tris
	SLE020	4-20%,Bis-Tris
	SLE021	8%,Bis-Tris
	SLE022	10%,Bis-Tris
	SLE023	12%,Bis-Tris
MOPS Running Buffer	SLB009	1L*20 suitable for SmartPAGE™ Precast Protein Gel Plus