

FuturePAGE™ Precast Protein Gel

Index

1. Product Description	1
2. Gel Separation Range	1
3. Operation Procedure	2
4. Related Products	4

1. Product Description

FuturePAGE™ Precast Protein Gel are polyacrylamide electrophoresis gels designed to separate a wide range of protein sizes by electrophoresis. FuturePAGE™ Precast Protein Gel are available in 10wells、12wells and 15wells formats. For the 10-well comb, the maximum loading volume per well is 70 μL, with a recommended loading volume below 35 μL. For the 12-well comb, the maximum loading volume per well is 50 μL, with a recommended loading volume below 25 μL. For the 15-well comb, the maximum loading volume per well is 30 μL, with a recommended loading volume below 15 μL. 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.

2. Gel Separation Range

4-12% MOPS	4-20% MOPS	8% MOPS	10% MOPS	12% MOPS
270 Kd	270 Kd	270 Kd	185 Kd	185 Kd
185 Kd	185 Kd	185 Kd	140 Kd	140 Kd
140 Kd	140 Kd	140 Kd	115 Kd	115 Kd
115 Kd	115 Kd	140 Kd	80 Kd	80 Kd
80 Kd	80 Kd	115 Kd	65 Kd	65 Kd
65 Kd	65 Kd	80 Kd	50 Kd	50 Kd
50 Kd	50 Kd	65 Kd	40 Kd	40 Kd
40 Kd	40 Kd	50 Kd	30 Kd	30 Kd
30 Kd	30 Kd	40 Kd	25 Kd	25 Kd
25 Kd	25 Kd	30 Kd	15 Kd	15 Kd
15 Kd	15 Kd	25 Kd	10 Kd	10 Kd

Precautions: When using this product, be sure to use a specialized electrophoresis buffer. It is recommended to directly use the ACE-matched specialized electrophoresis buffer: MOPS-SDS Running Buffer (Catalog number: BR0001-02). It is recommended that the MOPS-SDS Running Buffer not be reused more than 3 times.

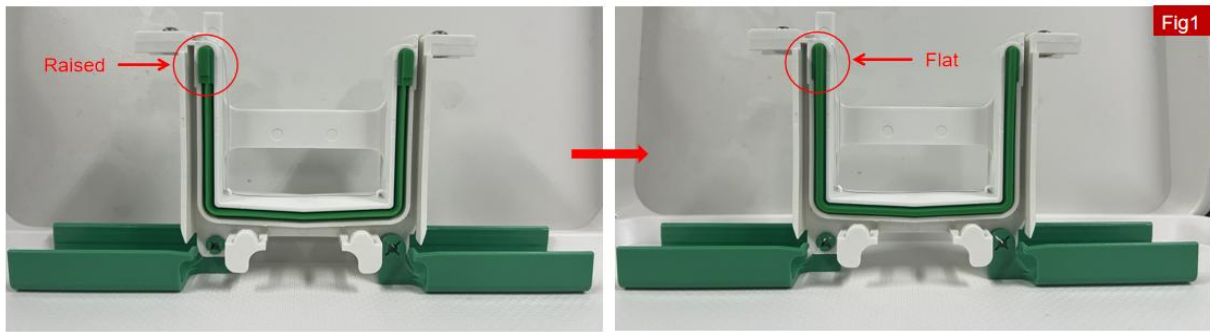
3. Operation Procedure

3.1 Preparation of Electrophoresis Buffer

Completely dissolve one packet of electrophoresis buffer powder in 1 L of deionized water with thorough stirring.

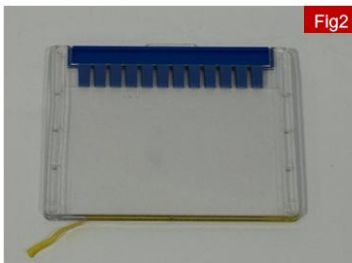
3.2 Electrophoresis Tank Assembly

When using an electrophoresis tank with a prominent silicone gasket, such as those from Bio-Rad or WIX, the green silicone gasket on the inner frame must be reoriented. Remove the gasket and re-insert it into the groove on the inner frame, ensuring that its flat side is facing outward (Figure 1).

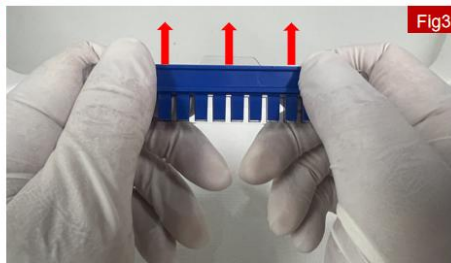


3.3 Pre-cast Gel Preparation

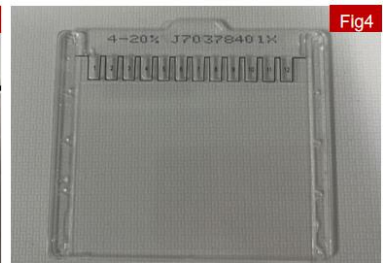
Remove the pre-cast gel from its packaging and detach the gold sealing tape from the bottom of the gel cassette (Figure 2). The comb is then carefully removed by first lifting its left, right, and middle sections slightly to disengage the teeth from the gel, and then steadily pushing it out as illustrated (Figure 3). After removing the comb, make sure the sample loading holes are neat before conducting the sampling (Figure 4).



Peel off the sealing tape at the bottom of the gel cassette



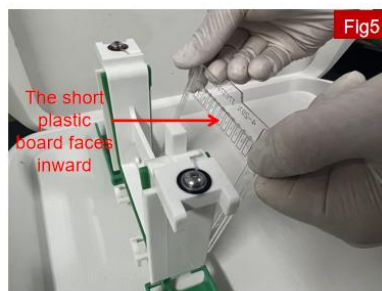
Gently remove the comb from the gel cassette



The precast protein gel is ready

3.4 Pre-cast Gel Installation

Seat the prepared pre-cast gel in the electrophoresis apparatus (Figure 5). Completely fill the inner chamber with electrophoresis buffer. For the outer chamber, add buffer to a level slightly below the inner chamber (when using 4 gels) or to the halfway point of the tank (when using 2 gels), taking care not to overfill beyond the cassette (Figure 6). It is recommended to use a syringe to gently flush the wells with 1x electrophoresis buffer to clear them of bubbles and residual storage buffer prior to loading.



Install the adhesive plate in the core of the electrophoresis tank



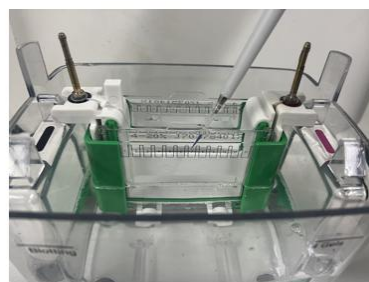
Add to the protein electrophoresis running buffer

3.5 Sample Loading

Load the processed protein samples by vertically inserting a pipette tip into the well and dispensing the liquid (Figure 7).



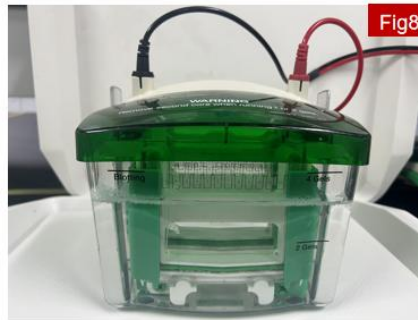
The correct operation for adding samples



The operation of adding samples incorrectly

3.6 Electrophoresis Run

Following sample loading, secure the lid on the tank and connect it to the power supply (Figure 8). It is recommended to run the gel at 160 V. Do not exceed the maximum voltage of 180 V.



3.7 Remove the gel from the plate:

- 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 (Figure 9).
- 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.



4. Related Products

Product	Cat.No.	Size
FuturePAGE™ 8% 10 Wells	ET10008Gel	10 PCs/Box
	ET10008LGel	25PCs/Box
FuturePAGE™ 8% 12 Wells	ET12008Gel	10 PCs/Box
	ET12008LGel	25PCs/Box
FuturePAGE™ 8% 15 Wells	ET15008Gel	10 PCs/Box
	ET15008LGel	25PCs/Box
FuturePAGE™ 10% 10 Wells	ET10010Gel	10 PCs/Box
	ET10010LGel	25PCs/Box
FuturePAGE™ 10% 12 Wells	ET12010Gel	10 PCs/Box
	ET12010LGel	25PCs/Box
FuturePAGE™ 10% 15Wells	ET15010Gel	10 PCs/Box
	ET15010LGel	25PCs/Box
FuturePAGE™ 12% 10 Wells	ET10012Gel	10 PCs/Box
	ET10012LGel	25PCs/Box
FuturePAGE™ 12% 12 Wells	ET12012Gel	10 PCs/Box

	ET12012LGel	25PCs/Box
FuturePAGE™ 12% 15 Wells	ET15012Gel	10 PCs/Box
	ET15012LGel	25PCs/Box
FuturePAGE™ 4-12% 10 Wells	ET10412Gel	10 PCs/Box
	ET10412LGel	25PCs/Box
FuturePAGE™ 4-12% 12 Wells	ET12412Gel	10 PCs/Box
	ET12412LGel	25PCs/Box
FuturePAGE™ 4-12% 15 Wells	ET15412Gel	10 PCs/Box
	ET15412LGel	25PCs/Box
FuturePAGE™ 4-20% 10 Wells	ET10420Gel	10 PCs/Box
	ET10420LGel	25PCs/Box
FuturePAGE™ 4-20% 12 Wells	ET12420Gel	10 PCs/Box
	ET12420LGel	25PCs/Box
FuturePAGE™ 4-20% 15 Wells	ET15420Gel	10 PCs/Box
	ET15420LGel	25PCs/Box