

EzDry Mini Gel Drying System

1. Catalog No. KD10MSYS

2. Contents

Component	Cat. No	Volume
EzDry Mini Gel Frame (1), Base (1) and Clips (8)	KD10M	1 SET
Cellophane Membrane, Mini	KDCM	200/PK
EzWay™ Gel Drying Solution	K14210	500ml

* **Note** : Each component can be purchased separately.

3. Description

- EzWay™ Gel Drying System is a device to dry gels by exposing to air. Unlike a vacuum dry method, air dry allows gels to be dried evenly without cracking.
- Air drying of mini gel (10cmx10cm)
- Less cracking : Uniform tension and less cracking by air drying
- Convenience : Easy setting on a Base
- Tight sealing : Fixing cellophanes between two frames using slide clips

4. How to use

1. After staining and destaining, transfer the gel in a round container and rinse gels three times for 2-3 minutes each time in D.W. Handle the gel gently to prevent it from cracking.
2. After rinsing, decant the D.W. and add 50ml of Drying Solution. Equilibrate the gel by shaking for 10-30 minutes. Refer to the following time table for immersing gels in Drying Solution.

% of Protein Gel	Time for Shaking in the Drying Solution
< 14 %	10 min or overnight for fixed protein
14-16 %	30 min or overnight for fixed protein
> 16 %	120 min or overnight for fixed protein
Cellophane sheet	5 min before drying

* **Note** : Trim off the gel by cutting any rough edges using the gel knife.

3. Immerse 2 pieces of Cellophane sheets in the Gel Drying Solution. Put in one sheet at a time. Do not soak the Cellophane for more than 5 minutes.
4. Place one side of the Gel Frame on the Base, and lay a piece of Cellophane, the gel and the second sheet of the Cellophane on it like the assembly in the Fig 1. Make sure no bubbles are trapped anywhere between the Cellophane and the gel. If necessary, add a little Drying Solution to the surface of the Cellophane.
5. Lay the remaining Frame on top of the assembly and push the clamps onto the four edges of the Frame. Flip the Base and stand the Frame assembly in a slit of the Frame as shown at the Fig 2.
6. Leave it in the air overnight. It may take 24 hours. Or, dry for 2-3 hours at 60-80°C using a fan heater or a hair dryer.

Fig 1. How to make a Frame assembly

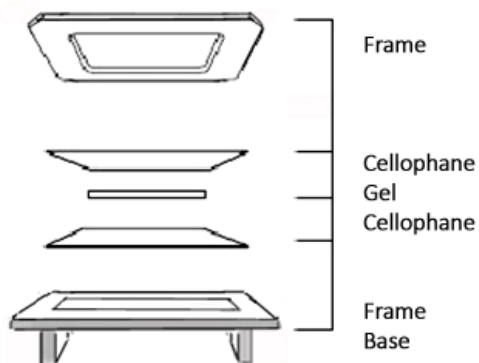
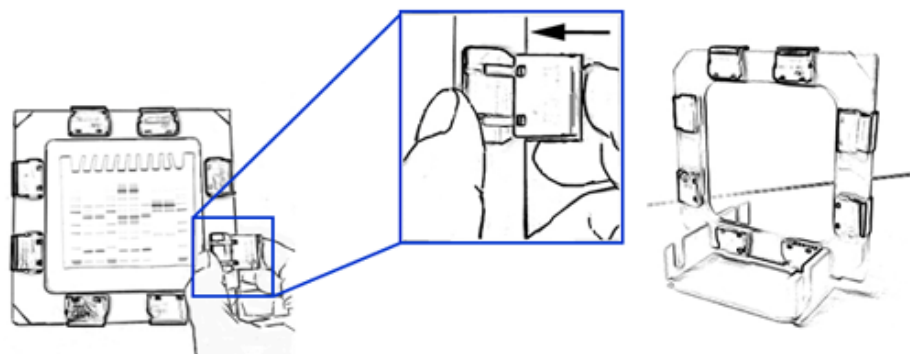


Fig 2. How to clamp the Frame



5. Troubleshooting

Problem	Cause	Corrective action
Gels cracking during drying	1) Air trapped between cellophane layers. 2) Rough edges or small crack on gel. 3) Gel was not soaked in Drying Solution long enough. 4) Gel was not fully immersed in Drying Solution.	1) Apply adequate Drying Solution. 2) Trim rough edges & small cracks. 3) Equilibrate gel in Drying Solution for a longer time. 4) Immerse the gel fully in Drying Solution.
Gels turning white after drying	Gels drying too fast.	Remove gel from possible drafts.

6. Related Products

Cat. No.	Product	Size
KD10M	EzDry Mini	1Set
KDCL	Cellophane Membrane, Large, 100/pk	1PK
KDCM	Cellophane Membrane, Mini, 200/pk	1PK
K14210	EzWay™ Gel Drying Solution	500ml

[한국어 매뉴얼]

1. 염색, 탈색 후 젤을 둥근 용기에 넣고 DW 로 2-3 분간 3 번 세척한다.
2. 세척 후 DW 를 버리고, Drying Solution 50ml 을 붓고 10-30 분간 shaking 한다. 각 젤의 %에 해당하는 shaking 시간은 아래의 테이블을 참고한다.

% of Protein Gel	Time for Shaking in the Drying Solution
< 14 %	10 min or overnight for fixed protein
14-16 %	30 min or overnight for fixed protein
> 16 %	120 min or overnight for fixed protein
Cellophane sheet	5 min before drying

Note: 젤 하단이 지지분할 경우, gel knife 를 이용하여 다듬는다. 이때 균열이 생기지 않도록 조심한다.

3. 2 장의 cellophane membrane 을 Drying Solution 에 한장씩 담군다. 담가두는 시간은 5 분이 넘지 않도록 한다.
4. Dryer Frame 한쪽을 Base 위에 놓고, Cellophane, Gel, Cellophane 순으로 올린다. 이때, Gel 과 Cellophane 사이에 기포가 생기지 않도록 조심한다. 필요시, 소량의 Drying Solution 을 Cellophane 겉에 덧바른다.
5. 나머지 한쪽 Frame 을 덮고 clip 으로 4 면을 고정한다. Base 를 뒤집고 홈에 Frame 을 끼워 세운다.
6. 자연상태에서 24 시간 건조한다. 혹은 온풍건조기나 헤어드라이어 등을 사용하여 60-80 도의 온풍에서 2-3 시간 건조한다.