

## e-PAGEL Instruction Manual

July 20th, 2016 Ver.2

### 1. Safety precautions

Before using the product, read this manual thoroughly at first. Do not start the operation until you understand the contents of manual. This document explains only methods utilized for specified purposes. Do not use the product for any purpose or by any method not described in this manual. If it is used for any purpose or by any method not described in this manual, an operator should take responsibility for all required safety measures and contingencies. Also, read a manual of equipment used with it simultaneously.

### 2. Application purpose

「e-PAGEL」is a precast polyacrylamide gel for electrophoresis of protein and DNA. An electrophoresis device (precast gel specification) exclusively for ATTO Mini-gel size are required.

### 3. Package

Product name	Size	Package
e-PAGEL	Gel size 90(W)x83(H)x1mm(t)	10/pk
	Glass plate size 120(W)x100(H)x2mm(t)(total 5mm)	

### 4. Components

Product name	Major components
e-PAGEL	Polyacrylamide gel

This product doesn't include a notifiable material exceeding to regulated amount for exclusion decided by PRTR Law, Poisonous and Deleterious Substances Control Act, and Industrial Safety and Health Law.

### 5. Preservation method

- Please keep refrigerated. Quality is impaired when freezing.
- The expiration date is displayed on the outer box and gel packaging bag.

### 6. Disposal method

- Follow a disposal method decided by the organization you belong to.  
Materials Plate: Glass Packaging: PET nylon

### 7. Necessary things other than the product

- Electrophoresis apparatus for ATTO Mini-gel size
- Power supply (recommended output over 300V, 150mA)
- Electrophoresis buffer etc.

### 8. Precautions for use

- Please keep refrigerated. (5~10°C) Please do not place near the cold air outlet. It may freeze.
- Freezing causes deformation such as bubbles, plate peeling, swelling and shrinkage, and can not be used.
- Please keep upright according to the mark on the outer box. If not, the quality may deteriorate.
- Follow the mark and store the gel with the well facing down. Please note that storing in the wrong direction will cause the quality to deteriorate.
- Please open the bag just before use. After opening, please use it immediately as the quality deteriorates.

- Handling the gel with bare hands may cause injury. Please wear gloves and protective clothing when handling.

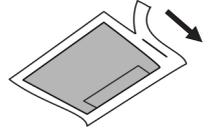
## 9. Usage

### 9-1. Preparation of gel and electrophoresis buffer

1. Open the packaging bag and take out the gel.

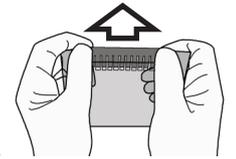
※When it is difficult to cut, please cut it with scissors.

※If you pull out the gel forcibly, the glass will peel off from the gel. Please avoid it.



2. Pull out the comb slowly.

※Place your fingers on the convex parts of the comb and remove the comb slowly by aligning the left and right sides. Remove the comb without bending or cutting the wells.



3. Prepare the electrophoresis buffer corresponding to the sample treatment (with or without SDS treatment) and the gel type.

**SDS treated protein** : EzRun (Tris/Gly/SDS)

: EzRun MOPS (Tris/MOPS/SDS)

**SDS-free protein and nucleic acid**

: EzRun TG (Tris/Gly)

**Tricine gel for low molecular weight** P-T16.5S/P-R16.5S

: EzRun T (Tris/Tricine/SDS)

4. Wash wells with electrophoresis buffer.

### 9-2. Electrophoresis

1. Place the gel in an electrophoresis device exclusively for ATTO Mini-gel size and pour the electrophoresis buffer.

※Please set the gel according to the instruction manual attached to the electrophoresis device.

2. Apply the appropriate amount of sample to each well.

※The maximum applied amount is expressed as about 60% of the maximum capacity of the well.

Comb (Number of wells)	Well size	Maximum applied amount
14 wells	4.2(W)×10(H) mm	24 μL
18 wells	2.9(W)×10(H) mm	18 μL
2-D	78(W)×25(H) mm	AgarGEL 1ea

3. Set the power supply referring to the following table.

Electrophoresis buffer	Voltage	Current	Time	
EzRun Tris/Glycine/SDS	C.C.	Starting: 75-90V Ending: 180-220V	20mA/gel C.C.	75-80min
	C.V.	250V C.V.	Starting: 70-100mA Ending: 30-50mA	25-35 min
EzRun MOPS Tris/MOPS/SDS	C.C.	Starting: 65-85V Ending: 130-180V	20mA/gel C.C.	60-70min
	C.C.	Starting: 100-120V Ending: 230-250V	20mA/gel C.C.	60-90 min
EzRun TG (Nucleic acid) Tris/Glycine	C.C.	Starting: 65-75V Ending: 130-160V	20mA/gel C.C.	130-150min

※C.C.; Constant Current, C.V.; Constant Voltage

