E-Gel™ Simple Runner Electrophoresis Device

invitrogen

QUICK REFERENCE Pub. No. 100062273 Rev. A.0

Contents

Catalog Number G8000

Components	Amount
E-Gel™ Simple Runner Electrophoresis Device	1 each
Power cord with universal adapter	1 each

Product description

- The Invitrogen™ E-Gel™ Simple Runner Electrophoresis Device is an easy-to-use automated device designed for use with pre-cast E-Gel™ agarose gels.
- The all-in-one device consists of the electrophoresis unit, and a power supply.
- Compatible with precast E-Gel™ single comb or double comb agarose gels.

Required materials

- DNA sample
- E-Gel™ agarose gel (See Gel Selection Guide)
- E-Gel™ DNA Ladder (See Ladder Selection Guide) or other relevant DNA molecular weight ladder
- 1X E-Gel™ Sample Loading Buffer (Cat. No. 10482055)

Important guidelines

- Overloading sample DNA will result in poor resolution.
- Dilute samples containing high salt concentration buffers (certain restriction enzyme and PCR buffers) 2- to 20-fold before loading.
- Keep all sample volumes uniform. Load any empty wells with 1X E-Gel™ Sample Loading Buffer or deionized water.
- Load gels within 15 minutes after opening; run gels within 1 minute after loading samples.
- Do not run the same gel more than once.

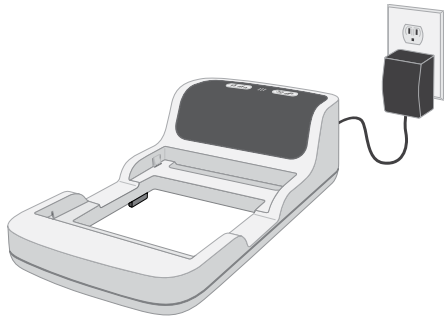
Online resources

- Visit our product pages for safety information and additional protocols.
- Go online to view related E-Gel™ products.
- For support, visit thermofisher.com/support.

For Research Use Only. Not for use in diagnostic procedures.

Instrument setup

Plug the E-Gel™ Simple Runner Electrophoresis Device adaptor plug into an electrical outlet.



Troubleshooting

Obeservation	Cause	Recommended action
No current	Cassette improperly inserted or is defective	Remove the gel cassette and re-insert the cassette, or use a fresh cassette.
Poor resolution or smearing of bands	Sample overloaded	Do not load more than 20–100 ng of DNA per well for samples with only one unique band, or up to 500 ng per well for samples with multiple bands. Test a range of concentrations to determine the optimal concentration for your particular sample.
	High salt concentration in samples	Dilute your samples 2- to 20-fold as described in the E-Gel™ Power Snap Electrophoresis System User Guide
	Sample not loaded properly or low sample volume loaded	Do not introduce bubbles while loading samples. For best resolution, keep all sample volumes uniform and load water into empty wells
Melted gel	Run time extended beyond recommended duration	Do not run the gel beyond recommended time limit

Limited product warranty and licensing information

Corporate entity: Life Technologies | Carlsbad, CA 92008 USA | Toll Free in USA 1.800.955.6288

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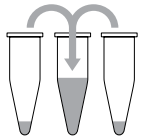
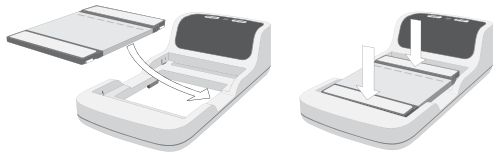
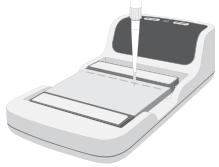
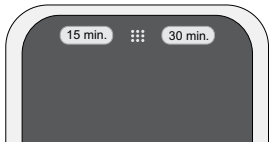
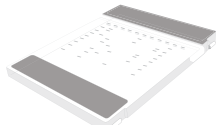
Print Options

DNA electrophoresis protocol

	Step		Action
1–5 min	1		**Prepare samples**	Prepare DNA samples in deionized water OR 1X E-Gel™ Sample Loading Buffer (Cat. No 10482055). ▪ The total sample volume is 20 µL for single or double comb gels. For double comb gels, load 10 µL of the molecular weight marker in lane M. ▪ For optimal separation use 20–100 ng DNA per band for samples containing one unique band or up to 500 ng per lane for samples containing multiple bands.
15–30 min	2		**Prepare gel**	a. Remove the gel from the package and gently remove the comb from the E-Gel™ cassette. b. Insert gel cassette into the E-Gel™ Simple Runner Electrophoresis Device, starting from the right edge. c. Press at the top and bottom to seat the gel cassette into the device. Do not apply pressure on the gel area. A steady, red light illuminates if the gel is correctly inserted.
	3		**Load samples**	a. Load 20 µL of prepared sample. Keep all sample volumes uniform. b. Load 20 µL of prepared E-Gel™ DNA ladder. c. Load 20 µL of of 1X E-Gel™ Sample Loading Buffer or deionized water in all empty wells.
	4		**Run the gel**	a. Press and release the 30-minute (single comb gel) OR 15 minute (double comb gel) button on the device to begin electrophoresis. b. The device automatically shuts off at the end of the run, and signals completion with a flashing red light and rapid beeping.
1–2 min	5		**Analyze gel**	a. Press and release either button to stop the beeping. Remove the gel cassette. b. Visualize the E-Gel™ agarose gel with a UV or blue-light transilluminator. Note: Bands will diffuse within 20 minutes after run completion.