invitrogen

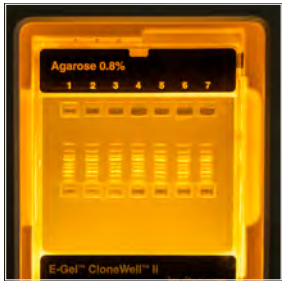
E-Gel precast gel electrophoresis system

Innovative, fast, bufferless agarose gel electrophoresis

DNA separation

ThermoFisher SCIENTIFIC

Contents



E-Gel precast agarose gel system for DNA and RNA electrophoresis

Simplify nucleic acid electrophoresis with the E-Gel precast agarose gel system

Invitrogen™ E-Gel™ precast gels are self-contained and ready for use with agarose, electrodes, and DNA stains (ethidium bromide, or Invitrogen™ SYBR™ Safe or SYBR™ Gold gel stains), packaged inside a disposable, UV-transparent cassette. There are no gels to pour, buffers to make, staining or destaining steps to perform, or gel boxes to assemble. Just load your samples and run. E-Gel precast gels offer excellent resolution and clarity in as little as 15 minutes and are ideal for analyzing PCR products, restriction digests, plasmid preparations, and genotyping products.

E-Gel precast gels are available in a variety of formats: routine or high-throughput, with SYBR Safe or SYBR Gold Nucleic Acid Gel Stain or ethidium bromide, and with agarose percentages suitable for either general purpose (0.8%, 1.2%, and 2%) or high-resolution (4%) separations. For help finding the right gel for your needs, visit page 8.

Our fastest, most sensitive and flexible precast agarose gels

Invitrogen™ E-Gel™ EX precast gels offer complete resolution of DNA or RNA samples typically in just 10 minutes and were developed for increased sensitivity over comparable gels containing ethidium bromide. The increased sensitivity allows you to use lower amounts of sample to help save time and money.

Get fast and sensitive analysis of DNA and RNA samples—minimize time-consuming and messy prep work

Run samples up to twice as fast as with conventional handcast gels. With a variety of agarose concentrations, well formats, and throughput capacities available to suit any application need, electrophoresis has never been easier. With E-Gel precast gels, you can run the gels any time. Just snap, load, and run the gels. Finish in less than half the time.

E-Gel Power Snap Electrophoresis System

Simplify DNA electrophoresis with the only fully integrated gel running and imaging platform

The Invitrogen™ E-Gel™ Power Snap Electrophoresis System combines rapid, real-time nucleic acid analysis with high-resolution image capture for unmatched convenience. The integrated design helps reduce workflow time and accelerate discovery.

Features of the E-Gel Power Snap Electrophoresis System:

- **Faster analysis**—go from sample loading to image capture in as little as 15 minutes
- **Simple operation**—intuitive user interface with large touchscreen and integrated operating system
- **Safer workflow**—minimize handling of hazardous chemicals when used with E-Gel™ precast gel cassettes

Small and powerful electrophoresis device

The Invitrogen™ E-Gel™ Power Snap Electrophoresis Device is a small, lightweight benchtop unit, featuring a blue-light transilluminator for safer operation and improved downstream cloning efficiency. It also comes with an amber filter for real-time sample tracking on E-Gel agarose gels prestained with SYBR Safe or SYBR Gold DNA stains. The device arrives with preprogrammed protocols for each type of available E-Gel agarose gel.

Instant image capture

Capture high-resolution Invitrogen™ E-Gel™ agarose gel images quickly with the easy-to-use Invitrogen™ E-Gel™ Power Snap Camera. The camera docks directly to the electrophoresis device, requiring no external power supply or connection to a desktop computer, enabling the freedom to capture images right at the bench.

To learn more, go to **thermofisher.com/powersnap**

E-Gel Power Snap Camera

High-resolution digital camera
for quick, easy image capture

Touchscreen
with intuitive user interface

Intuitive analysis software
with auto-exposure and auto-capture

Front-facing USB port
for easy file transfer

32 Gb internal storage
>3 months of work with camera

Designed for standard
E-Gel Cassette electrophoresis

E-Gel Power Snap Electrophoresis Device

Amber filter
for real-time sample monitoring

Integrated power unit and
blue-light transilluminator

Preprogrammed protocols
for rapid analysis

Compatible with all standard and low-throughput E-Gel agarose gels, including: E-Gel EX, E-Gel SYBR Safe, E-Gel SizeSelect II, E-Gel CloneWell II, and E-Gel Go! gels.

Request a demo at **thermofisher.com/powersnap**

E-Gel system for routine DNA or RNA electrophoresis

Empower everyday electrophoresis

Combining E-Gel precast agarose gels with the E-Gel Power Snap Electrophoresis System offers fast and convenient electrophoresis of 8–16 nucleic acid samples per gel in the 20 bp–10 kb range.

The E-Gel system for routine electrophoresis enables:

- **Real-time analysis**—visualize migration of PCR products, restriction digests, and genotyping samples
- **Simpify workflows**—no gels to pour, buffers to make, staining or destaining steps to perform; just load your samples and go
- **More efficient cloning**—when used together, the E-Gel Power Snap Device and Invitrogen™ E-Gel™ CloneWell™ II gels provide improved cloning efficiency compared to standard UV-based methods

Gel purification in three simple steps using E-Gel CloneWell II agarose gels.

To learn more, go to **thermofisher.com/egels**

E-Gel system for high-throughput electrophoresis

Integrated design saves space, while delivering superior performance

Accelerate high-throughput electrophoresis analysis with Invitrogen™ E-Gel™ 48 and E-Gel™ 96 precast gels run on our expandable Invitrogen™ E-Base™ Electrophoresis System. The integrated design of the Invitrogen™ Mother E-Base™ and Daughter E-Base™ devices saves space and allows for up to 384 samples to run at one time.

Mother E-Base device

Daughter E-Base device

Mother E-Base Electrophoresis Device

A stand-alone device, the Mother E-Base device contains a power supply and is used for electrophoresis of one E-Gel 48 or E-Gel 96 precast gel. Each Mother E-Base device has a “power/program” and “time” button, and contains an LED light and a digital display. The gel cassette is inserted into the two-electrode connections.

Daughter E-Base Electrophoresis Device

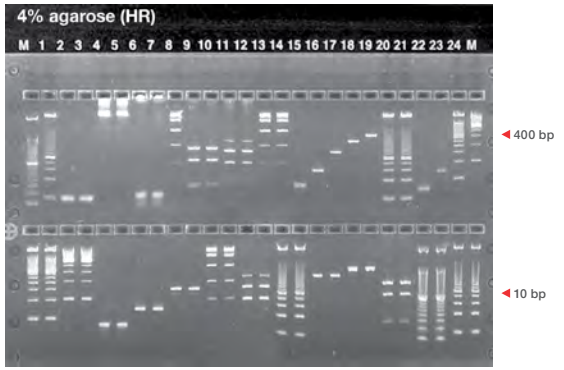
The Daughter E-Base device provides expandable sample analysis options by connecting up to three E-Gel 48 or E-Gel 96 precast gels to the Mother E-Base device for electrophoresis. The Daughter E-Base device cannot be used independent of a Mother E-Base device.

Up to 384 samples in one run

Connect multiple Daughter E-Base devices to the Mother E-Base device to create a multiunit system capable of running four E-Gel 48 or E-Gel 96 precast gels simultaneously.

E-Gel 48 and E-Gel 96 precast agarose gels

E-Gel 48 and E-Gel 96 precast agarose gels are ready to use and designed for medium- to high-throughput resolution of DNA fragments. Load the E-Gel 48 and E-Gel 96 precast gels with a multichannel pipettor or robotic liquid handling system for increased throughput. E-Gel 48 and E-Gel 96 precast gels run on the Mother and Daughter E-Base integrated power supplies. DNA bands resolve clearly in just 20 minutes.



Clear resolution on the E-Gel 48 4% agarose gel. Various samples, including DNA ladders, dsRNA, and PCR products, ranging in size from 10–400 bp, were run.

Choose the E-Gel precast gel that fits your needs

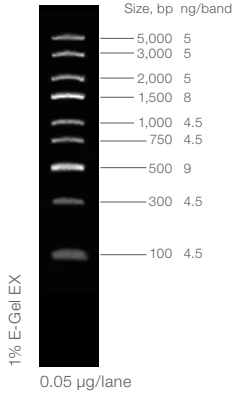
Product		Description	Focus	Incorporated stain	Run time	Agarose %	Resolution
E-Gel EX		• Single row of 10 sample wells and 1 marker well • Our fastest, most sensitive, and flexible precast agarose gels	Fastest resolving gel	SYBR Gold	10 min	1.0% 2.0% 4.0%	100 bp–5 kb 50 bp–2 kb 10 bp–400 bp
E-Gel Go!		• Single row of 4 sample wells • Convenient when you only need to run a few samples	Low throughput	SYBR Gold	15 min	1.0%, 2.0%	100 bp–5 kb 100 bp–1.5 kb
E-Gel		• Single row of 12 sample wells, or 2 rows with 8 sample wells and 1 marker well each • Available with SYBR Safe DNA Stain—a safer alternative to ethidium bromide	General purpose	SYBR Safe Ethidium bromide	30 min 30 min	1.2%, 2.0% 0.8%, 1.2%, 2.0%, 4.0%	800 bp–10 kb 100 bp–5 kb 100 bp–2 kb 20 bp–500 bp
E-Gel CloneWell II		• 2 rows of 7 sample wells • Convenient purified DNA recovery directly from the gel with a pipette	High-efficiency cloning	SYBR Safe	14–36 min	0.8%	100 bp–6 kb
E-Gel SizeSelect II		• 2 rows of 7 sample wells • Most convenient method for the purification of DNA libraries for next-generation sequencing (NGS) applications	Purification of DNA for NGS	SYBR Gold	8–20 min	2.0%	50 bp–1 kb
E-Gel 48		• 48 sample wells and 4 marker wells • Compatible with multichannel pipettors or liquid handling robots for increased throughput	Med/high throughput	Ethidium bromide	20 min	1.0% 2.0% 4.0%	400 bp–10 kb 50 bp–3 kb 10 bp–400 bp
E-Gel 96		• 96 sample wells and 8 marker wells in a unique staggered-well format • Compatible with multichannel pipettors and 8-, 12- and 96-pin liquid handling robots for high-throughput electrophoresis	High throughput	SYBR Safe or ethidium bromide	12 min	1.0% 2.0%	1 kb–10 kb 100 bp–2 kb

E-Gel DNA ladders and starter kits

E-Gel DNA ladders

Invitrogen™ E-Gel™ DNA ladders are premixed with loading buffer and formulated specifically for optimum performance on E-Gel precast agarose gels.

- **Performance**—designed for use on E-Gel agarose gel cassettes
- **Sharp, clear bands**—chromatography-purified fragments for consistent and reliable results
- **Versatile**—broad size range from 10 bp to 12 kb
- **Convenient**—premixed in loading buffer, supplied with loading dye for sample DNA, and stable at room temperature



The E-Gel 1 Kb Plus Express DNA Ladder was run on a 1% E-Gel EX agarose gel with the Invitrogen™ E-Gel™ Power Snap System using the E-Gel EX 1–2% program setting for 8 minutes.

E-Gel precast gel starter kits

Our E-Gel™ Power Snap System Starter Kits include all the components you need to start performing nucleic acid separation, analysis, and collection in minutes, not hours.

The E-Gel Power Snap Starter Kit includes:

- **E-Gel Power Snap Device and Camera (optional)**—the convenience of rapid, real-time nucleic acid analysis with high-resolution image capture
- **E-Gel precast cassettes**—help minimize time-consuming and messy prep work
- **E-Gel DNA ladder**—designed for optimal performance and clear results in E-Gel cassettes

To learn more, go to **thermofisher.com/ladders**

Ordering information

Product	In-gel dye	Gel percentage	Quantity	Cat. No.
E-Gel Power Snap Electrophoresis System				
E-Gel Power Snap Electrophoresis Device			1 unit	G8100
E-Gel Power Snap Camera			1 unit	G8200
E-Gel Power Snap Electrophoresis System			1 device, 1 camera	G8300
High-throughput devices				
Mother E-Base Device			1 unit	EBM03
Daughter E-Base Device			1 unit	EBD03
Starter Kit—Device*				
E-Gel Power Snap Electrophoresis Device Starter Kit, EX 1%	SYBR Gold	1%	1 starter kit	G8141ST
E-Gel Power Snap Electrophoresis Device Starter Kit, EX 2%	SYBR Gold	2%	1 starter kit	G8142ST
E-Gel Power Snap Electrophoresis Device Starter Kit, SYBR Safe 1.2%	SYBR Safe	1.2%	1 starter kit	G8151ST
E-Gel Power Snap Electrophoresis Device Starter Kit, SYBR Safe 2%	SYBR Safe	2%	1 starter kit	G8152ST
E-Gel Power Snap Electrophoresis Device Starter Kit, CloneWell	SYBR Safe	0.8%	1 starter kit	G8168ST
E-Gel Power Snap Electrophoresis Device Starter Kit, SizeSelect	SYBR Gold	2%	1 starter kit	G8162ST
Starter Kit—System*				
E-Gel Power Snap Electrophoresis System Starter Kit, EX 1%	SYBR Gold	1%	1 starter kit	G8341ST
E-Gel Power Snap Electrophoresis System Starter Kit, EX 2%	SYBR Gold	2%	1 starter kit	G8342ST
E-Gel Power Snap Electrophoresis System Starter Kit, SYBR Safe 1.2%	SYBR Safe	1.2%	1 starter kit	G8351ST
E-Gel Power Snap Electrophoresis System Starter Kit, SYBR Safe 2%	SYBR Safe	2%	1 starter kit	G8352ST
E-Gel DNA Ladders				
E-Gel 1 Kb Plus DNA Ladder			2 x 1.25 mL	10488090
E-Gel 1 Kb Plus Express DNA Ladder			2 x 1.25 mL	10488091
E-Gel 50 bp DNA Ladder			2 x 1 mL	10488099
E-Gel Low Range Quantitative DNA Ladder			1 x 1 mL	12373031
E-Gel Sizing DNA Ladder			2 x 1.25 mL	10488100
E-Gel Ultra Low Range DNA Ladder			2 x 1 mL	10488096
E-Gel 96 High Range DNA Marker			2 x 1 mL	12352019

* Each starter kit includes an E-Gel Power Snap Device, viewing glasses, E-Gel DNA ladder, and E-Gel precast cassettes.

Ordering information

Product	In-gel dye	Gel percentage	Quantity	Cat. No.
Fastest-resolving gels				
E-Gel EX Agarose Gels, 1%	SYBR Gold	1%	10/20 gels	G401001/G402001
E-Gel EX Agarose Gels, 2%	SYBR Gold	2%	10/20 gels	G401002/G402002
E-Gel EX Agarose Gels, 4%	SYBR Gold	4%	10 gels	G401004
E-Gel products with SYBR Safe stain				
E-Gel SYBR Safe Gels, 1.2%	SYBR Safe	1.2%	18 gels	G521801
E-Gel SYBR Safe Gels, 2%	SYBR Safe	2%	18 gels	G521802
E-Gel precast gels for low throughput				
E-Gel Go! Agarose Gel, 1%	SYBR Gold	1%	10/20 gels	G441001/G442001
E-Gel Go! Agarose Gel, 2%	SYBR Gold	2%	10/20 gels	G441002/G442002
E-Gel CloneWell II precast gels for cloning				
E-Gel CloneWell II Agarose Gel, 0.8%	SYBR Safe	0.8%	10 gels	G661818
E-Gel SizeSelect II precast gels for NGS				
E-Gel SizeSelect II Agarose Gel, 2%	SYBR Gold	2%	10 gels	G661012
E-Gel precast gels for high throughput				
E-Gel 48 Agarose Gels, 1%	Ethidium bromide	1%	8 gels	G800801
E-Gel 48 Agarose Gels, 2%	Ethidium bromide	2%	8 gels	G800802
E-Gel 48 Agarose Gels, 4%	Ethidium bromide	4%	8 gels	G800804
E-Gel 96 Agarose Gels, 1%	Ethidium bromide	1%	8 gels	G700801
E-Gel 96 Agarose Gels, 2%	Ethidium bromide	2%	8 gels	G700802
E-Gel 96 Agarose Gels, 2%	SYBR Safe	2%	8 gels	G720802

For added convenience, stock your Supply Center with E-Gel cassettes and DNA ladders for direct and immediate access.

Request our E-Gel products for your Supply Center at **thermofisher.com/scproductrequests**

invitrogen

Find out more at **thermofisher.com/egels**

ThermoFisher SCIENTIFIC