QUICK REFERENCE

E-Gel® Go! Base

Cat. no. G4400

Rev. Date: 25 June 2011

Part no. 25-1059 MAN0004501

The E-Gel® Go! Base runs E-Gel® Go! 1% and 2% pre-cast agarose gels. The base contains an integrated transilluminator and amber filter for visualization of the run in real-time. The base has a built in power supply with power cord. A separate battery pack is available for operating the device away from the bench. Contact Technical Support, or refer to the E-Gel® Go! manual for more information.

E-Gel® Go! Base

E-Gel® Go! Portable Battery Pack

Kit Contents

Each E-Gel® Go! kit (Cat. no. G4400) contains an E-Gel® Go! Base with power cable, and 4 adapters. See the E-Gel® Go! manual for more information, and unpacking instructions.

The E-Gel® Go! Portable Battery Pack kit (Cat. no. G4405) contains an E-Gel® Go! Portable Battery Pack.

Prepare Samples

For best results with E-Gel® Go! agarose gels, follow these guidelines:

- Use a total sample volume of 10 µL for each well.
- If the sample is in high salt buffer, dilute 2–20 fold before loading.
- If the sample is <10 µL, increase the volume with E-Gel® Sample Loading Buffer or deionized water.
- Adjust the amount of DNA in each sample according to the number of bands being separated.

% Gel	Single DNA Band	Multiple DNA Bands	Optimal Sample	Maximum Sample
1%	1.5–40 ng	1.5–20 ng/band	100 ng	200 ng
2%	1.5–150 ng	1.5–100 ng/band	100 ng	500 ng

Intended Use
For research use only. Not intended for animal or human therapeutic or diagnostic use.

Procedure

Running the E-Gel® Go! Agarose Gel

1. Insert the adapter plug on the E-Gel® Go! Base into an electrical outlet OR

   Attach the E-Gel® Go! Base to the E-Gel® Go! Portable Battery Pack.

   Press the **Start** button to activate the E-Gel® Go! Base after it is plugged in (or if it goes into standby mode).

2. Press and hold the **Start** button until the amber light next to the desired run time is illuminated. The recommended (default) run time is 15 minutes. A "HR" (30 minute) setting is available to separate bands that are similar in size.

3. Remove the gel cassette from the package and gently remove the comb.

4. Insert the gel cassette into the E-Gel® Go! Base and close the cover. The status indicator LED illuminates with a steady red light if the cassette is correctly inserted.

5. Open the cover and load the gel as follows:
   - 10 µL DNA Ladder (100–250 ng)*
   - 10 µL of sample into each well
   - 10 µL deionized water into any remaining empty wells

   *For E-Gel® Go! 2% agarose gels, use the E-Gel® 50 bp DNA Ladder or E-Gel® 1 Kb Plus DNA Ladder. For E-Gel® Go! 1% agarose gels use the E-Gel® 1 Kb Plus DNA Ladder.

6. Close the cover of the E-Gel® Go! Base.

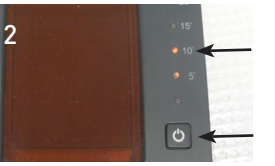
7. Press the **Start** button to start the run. The red light turns to a steady green light indicating the start of the run.

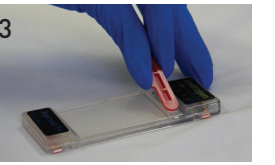
   Note: Do not wait more than 2 minutes between loading the gel and starting electrophoresis.

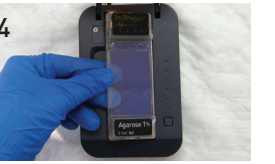
8. To view the bands, press the **Light** button. The transilluminator turns off automatically after 2 minutes.

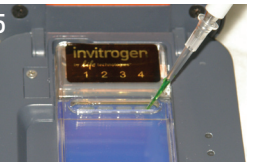
   Note: An internal battery allows the transilluminator to function even when the E-Gel® Go! Base is not plugged into an electrical outlet.

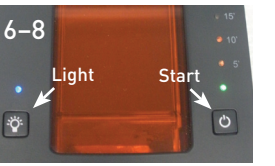
9. The run stops automatically after the programmed time has elapsed. The end of the run is signaled by a flashing red light and rapid beeping.

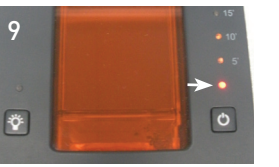










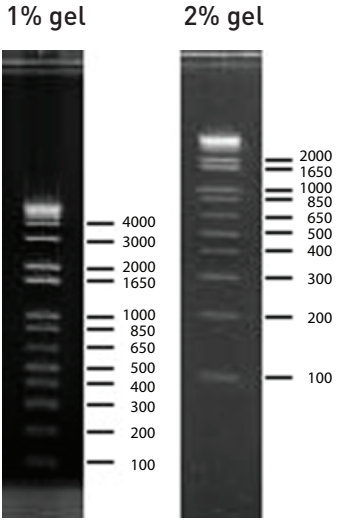


Running the E-Gel® Go! Agarose Gel, continued

10. Turn the blue light off using the **Light** button before opening the cover and removing the gel.
11. Results can be documented using any standard imaging device. Best results are achieved using a blue light source with imaging settings for "SYBR" dyes.

Example

100 ng of E-Gel® 1Kb Plus DNA Ladder run on 1% and 2% E-Gel® Go! agarose gel for 15 minutes using an E-Gel® Go! Base. The ladder contains twelve bands ranging in size from 1000 bp to 12,000 bp in 1000-bp increments and eight bands ranging in size from 100 to 1650 bp. In addition, the ladder contains the dyes Xylene Cyanol FF (XCFF) and Tartrazine. These dyes allow you to visually track DNA migration during electrophoresis, and indicate when maximum resolution is achieved.



Additional Products

Item	Amount	Cat. no.
E-Gel® Go! Portable Battery Pack	1 unit	G4405
E-Gel® Sample Loading Buffer	1.25 mL	10482055
E-Gel® Go! 1% Agarose Gels	10-pak	G4410-01
E-Gel® Go! 1% Agarose Gels	20-pak	G4420-01
E-Gel® Go! 2% Agarose Gels	10-pak	G4410-02
E-Gel® Go! 2% Agarose Gels	20-pak	G4420-02
E-Gel® 1 Kb Plus DNA Ladder	500 µL	10488090
E-Gel® 50 bp DNA Ladder	500 µL	10488099
E-Gel® Go! Car Adapter	1 adapter	G4444

Troubleshooting

Observation	Cause	Solution
No current	Cassette improperly inserted or is defective	Remove the gel cassette and re-insert the cassette correctly. Use a fresh cassette.
Poor resolution or smearing of bands	Sample overloaded	Refer to **Prepare Samples** for appropriate loads.
	High salt samples	Dilute your samples 2- to 20-fold as described in the E-Gel® Technical Guide.
	Sample not loaded properly or sample volume too low	Do not introduce bubbles while loading samples. For proper resolution, keep all sample volumes uniform and load water into empty wells.
	Delay in starting electrophoresis	Start the run within 2 minutes of loading the gel
Melted gel	Run time too long, resulting in increased current	Do not run the gel longer than 20 minutes, or 30 minutes for "HR".
Sample leaking from wells	Wells damaged during comb removal or gel loading	Be sure to remove the comb gently without damaging the wells.
	Sample volume too large	Load the recommended sample volume in each well.
High background, suboptimal, or no image	No filters or wrong filter set.	See E-Gel® Technical Guide to determine the optimal filter sets to use, or contact the instrument manufacturer for advice.
	Photographic settings not optimal	Optimize settings of your system for E-Gel® with SYBR Safe™ empirically. You may need to increase the exposure time or gain setting.

Disposal

The proprietary stain in E-Gel® Go! products is a potential mutagen. Follow state and local guidelines for disposal of these materials.

Purchaser Notification

The following Limited Use Label Licenses cover these products:

Limited Use Label License: Research Use Only

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact outlicensing@lifetech.com or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

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