

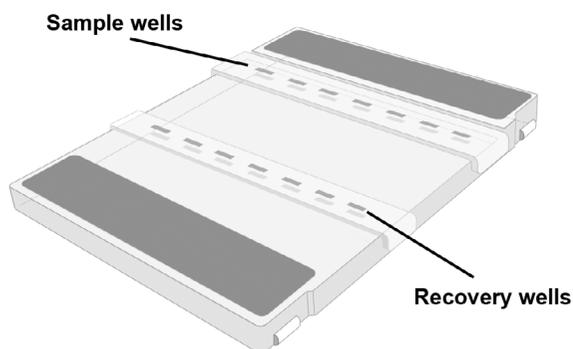
**Contents**

Catalog Number G661818

Components	Amount
E-Gel™ CloneWell™ II Agarose Gel with SYBR™ Safe Stain, 0.8%	10 gels
10X Sample Loading Buffer	500 µL

**Product description**

- The Invitrogen™ E-Gel™ CloneWell™ II Agarose Gels provide a fast, safe, and effective DNA fragment isolation method for DNA cloning workflows.
- The gels contain SYBR™ Safe stain that is visible by blue light transillumination, minimizing DNA damage, and improving cloning efficiency when compared to conventional methods.
- E-Gel™ CloneWell™ II Agarose Gels are specifically designed for use with the E-Gel™ Power Snap Electrophoresis Device (Cat. No. G8100, G8300).



E-Gel™ CloneWell™ II Agarose Gel

**Online resources**

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

**Required materials**

- E-Gel™ 1 Kb Plus Express DNA Ladder (Cat. No. 10488091)
- UltraPure™ DNase/RNase-Free Distilled Water (Cat. No. 10977023)
- 10X Sample Loading Buffer (included with E-Gel™ CloneWell™ II Agarose Gels)
- E-Gel™ Power Snap Electrophoresis Device (Cat. No. G8100)
- (*Optional*) E-Gel™ Power Snap Camera (Cat. No. G8200)
- Safe Imager™ viewing glasses (Cat. No. S37103; included with G8100)

**Important guidelines**

- Load 200–800 ng of total sample DNA per well. Divide samples with higher amounts of DNA across multiple wells.
- Samples containing ≥ 50 mM NaCl, 100 mM KCl, 10 mM acetate ions, or 10 mM EDTA (i.e., certain restriction enzyme and PCR buffers) will cause loss of resolution on E-Gel™ agarose gels. Dilute samples containing high salt levels 2- to 5-fold to obtain the best results.
- Load the E-Gel™ CloneWell™ II agarose gel within 15 minutes after opening the pouch, and run the gel within 1 minute after loading samples.
- Always wear Safe Imager™ viewing glasses when working with the E-Gel™ Power Snap Electrophoresis Device cover open.

i Troubleshooting

For detailed troubleshooting instructions see the E-Gel™ Power Snap Electrophoresis System User Guide at thermofisher.com or contact Technical Support.

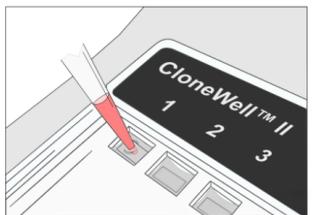
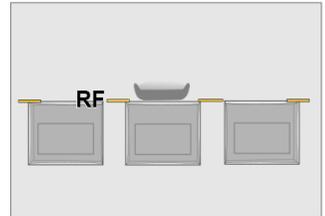
i Limited product warranty and licensing information

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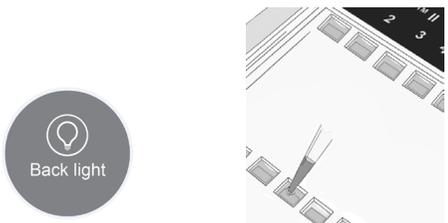
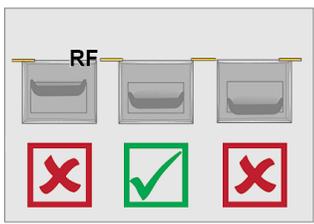
DNA electrophoresis protocol

		Step	Action						
5-10 min	1	 <p>Prepare samples</p>	<p>Prepare samples in a total volume of 25 μL. Scale volumes proportionally for lower volumes.</p> <table border="1"> <thead> <tr> <th>Component</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>Sample</td> <td>22.5 μL</td> </tr> <tr> <td>10X Sample Loading Buffer</td> <td>2.5 μL</td> </tr> </tbody> </table> <p>Important! See Important guidelines for sample amount limitations and samples containing high salt content.</p>	Component	Volume	Sample	22.5 μ L	10X Sample Loading Buffer	2.5 μ L
	Component	Volume							
	Sample	22.5 μ L							
10X Sample Loading Buffer	2.5 μ L								
2	 <p>Prepare gel</p>	<ol style="list-style-type: none"> Remove the gel from the package and gently remove the combs. Do not allow the combs to bend or create suction in the wells during removal. Insert gel cassette into the E-Gel™ Power Snap Electrophoresis Device, starting from the right edge. Press down on the left side of the cassette to secure the cassette. 							
3	 <p>Load samples</p>	<ol style="list-style-type: none"> Fill all wells of both rows with 50 μL of deionized water. Load 25 μL of sample with 1X Sample Loading Buffer into wells from the bottom up. Do not damage the gel or introduce bubbles into the wells. Load 25 μL of 1X E-Gel™ 1 Kb Plus Express DNA Ladder into a well. 							
12-40 min	4	 <p>Run the gel</p>	<ol style="list-style-type: none"> Set up run by selecting the CloneWell 0.8% protocol on the E-Gel™ Power Snap Electrophoresis Device. Adjust protocol time according to expected migration time of your target fragment to the reference line (see Guidelines for estimating run time). Press Start run to start the gel protocol. 						
	5	 <p>Check status</p>	<ol style="list-style-type: none"> Check gel status by activating the Back light. Monitor the gel during the run to avoid target fragment missing the recovery well. Pause the gel when the band of interest reaches reference line (RF) on the second row of recovery wells. Proceed to DNA collection protocol. 						

DNA collection protocol

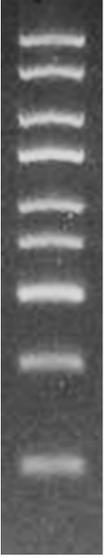
Important! Wear Safe Imager™ viewing glasses before starting the DNA collection protocol.

Reduce ambient light or work in dark room for better visibility.

		Step	Action
5 min	6		Prepare wells <ol style="list-style-type: none"> Open the filter lid of the E-Gel™ Power Snap Electrophoresis Device, and activate the Back light. Load 40 µL of deionized water to all recovery wells. Do not allow water to spill over the edge of the wells.
	7		Collect DNA fragment <ol style="list-style-type: none"> Resume the run and carefully observe as the band of interest enters the recovery well. Stop the gel and recover the sample with a pipette. Avoid piercing the agarose during collection. Proceed with downstream cloning workflow. No gel-purification required.
	8		Reverse run (Optional) <ol style="list-style-type: none"> Stop the run and switch to the Reverse E-Gel protocol if the band of interest passes the collection well. Press Set up run and select the the Reverse E-Gel protocol. Press Start run. Carefully observe as the band of interest enters the recovery well and collect DNA fragment.

Guidelines for estimating run time

- Refer to the E-Gel™ 1 Kb Plus Express DNA Ladder migration pattern table to estimate target DNA run time to the reference line.
- The run times indicated in the table are estimates. Monitor your gel in real time during the run to ensure the sample does not pass the recovery well.
- Identically sized bands in different wells may migrate differently.
- DNA fragment size, amount, and salt content can affect migration rates.

Ladder	Fragment size	DNA amount (per 25 µL)	Migration time to reference line
 <p>Size (bp)</p> <p>— 5000</p> <p>— 3000</p> <p>— 2000</p> <p>— 1500</p> <p>— 1000</p> <p>— 750</p> <p>— 500</p> <p>— 300</p> <p>— 100</p>	5,000 bp	100 ng	~27.5 min
	3,000 bp	100 ng	~23 min
	2,000 bp	100 ng	~20.5 min
	1,500 bp	160 ng	~19 min
	1,000 bp	90 ng	~17 min
	750 bp	90 ng	~16 min
	500 bp	180 ng	~15 min
	300 bp	90 ng	~14 min
	100 bp	90 ng	~13 min