**invitrogen** QUICK REFERENCE

# Mini Gel Tank

Cat. no. A25977

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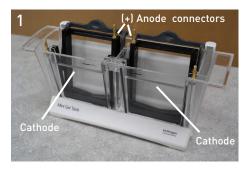
Rev. C.0

Instructions for using the Mini Gel Tank to perform electrophoresis are described below. For detailed instructions, refer to the manual available from thermofisher.com. See reverse side for protein transfer instructions using the Mini Blot Module.

## **Before Starting**

- Make sure that the power supply is adequate for the number of gels you are going to run.
- If your power supply is not designed for use with covered or retractable power leads, make sure the power supply is off, plug Novex™
   Power Supply Adapters into the appropriate leads of the power supply, and secure them with an Allen wrench (see manual for details).
- Select mini gels appropriate for your application.
- Prepare 1X running buffer appropriate for your mini gels. Each chamber requires 400 mL of buffer.

#### Procedure



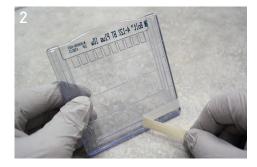
 Snap the electrophoresis tank into the base, and place the cassette clamp(s) into the chamber(s) with the anode connector(s) (+) aligned to the center.

Fill the chamber(s) with 1X buffer to the level of the cathode.



**4.** Make sure the wells are completely filled with 1X buffer.

Load your samples and markers.



**2.** Remove the comb, and peel away the tape at the bottom of the gel cassette.

Rinse the wells 3 times with 1X buffer.



**3.** Place the cassette in the chamber with the wells facing towards you.

Hold the cassette in a raised position and close the clamp by moving the cam handle forward.



**5.** Hold the cassette and release the cassette clamp.

Gently lower the cassette so that it rests on the bottom of the chamber, and close the cassette clamp.

Add 1X buffer to the level of the fill line.



**6.** Make sure the power supply is **o**ff.

If only running one gel, remove the cassette clamp from unused chamber.

Place the lid on the tank and plug the electrode cords into the power supply.

Turn the power supply on to begin electrophoresis.



# Mini Blot Module

Cat. no. B1000

Instructions for using the Mini Blot Module to transfer proteins onto a membrane are described below. For detailed instructions, refer to the manual available from thermofisher.com. See reverse side for instructions on using the Mini Gel Tank for electrophoresis.

## **Before Starting**

- Select transfer membrane appropriate for your purpose, and prepare it for transfer (refer to Mini Blot Module manual for details).
- Prepare 250 mL of 1X transfer buffer for each transfer.
- Soak two pieces of filter paper briefly in 1X transfer buffer.
- Soak two sponge pads thoroughly in 1X transfer buffer. Squeeze submerged pads to ensure that air bubbles are removed.

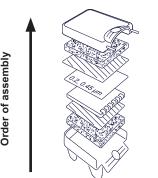
  Note: It is important to use clean sponge pads to avoid protein contamination. (refer to the manual for details on care of sponge pads).
- Trim wells and foot from gel.

### **Transfer Conditions**

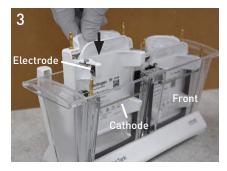
Transfer protein (using 1 or 2 blot modules) for 60 min at a constant voltage of 10 V (nitrocellulose) or 20 V (PVDF). Do not exceed 30 V.

#### Protein Transfer Protocol

- **1.** Place the cathode core (–) on a flat surface, and assemble the sandwich according to the diagram (right).
  - Only one gel can be transferred at a time in a single module.
  - Always handle the membrane with the Blotting Tweezers.
  - Use the Blotting Roller to remove any bubbles between layers of the sandwich.
- **2.** Place the anode core (+) on top of the sandwich, and close the module assembly.



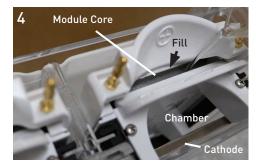
Anode core (+)
Sponge pad
Filter paper
Membrane
Gel
Filter paper
Sponge pad
Cathode core (-)



**3.** Make sure any cassette clamps are removed from the chambers.

Insert the blot module with the cathode core (–) facing the front.

The blot module should be seated so that the electrode makes contact with the cathode.



**4.** Add 1X transfer buffer to the module core if the sandwich is not completely submerged.

Add deionized water or 1X transfer buffer (~225 mL) to the chamber up to the level of the cathode.



**5.** Make sure the power supply is **off**. Place the lid on the tank and plug the electrode cords into the power supply. Turn the power supply on to begin transfer.

#### **Limited Product Warranty:**

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