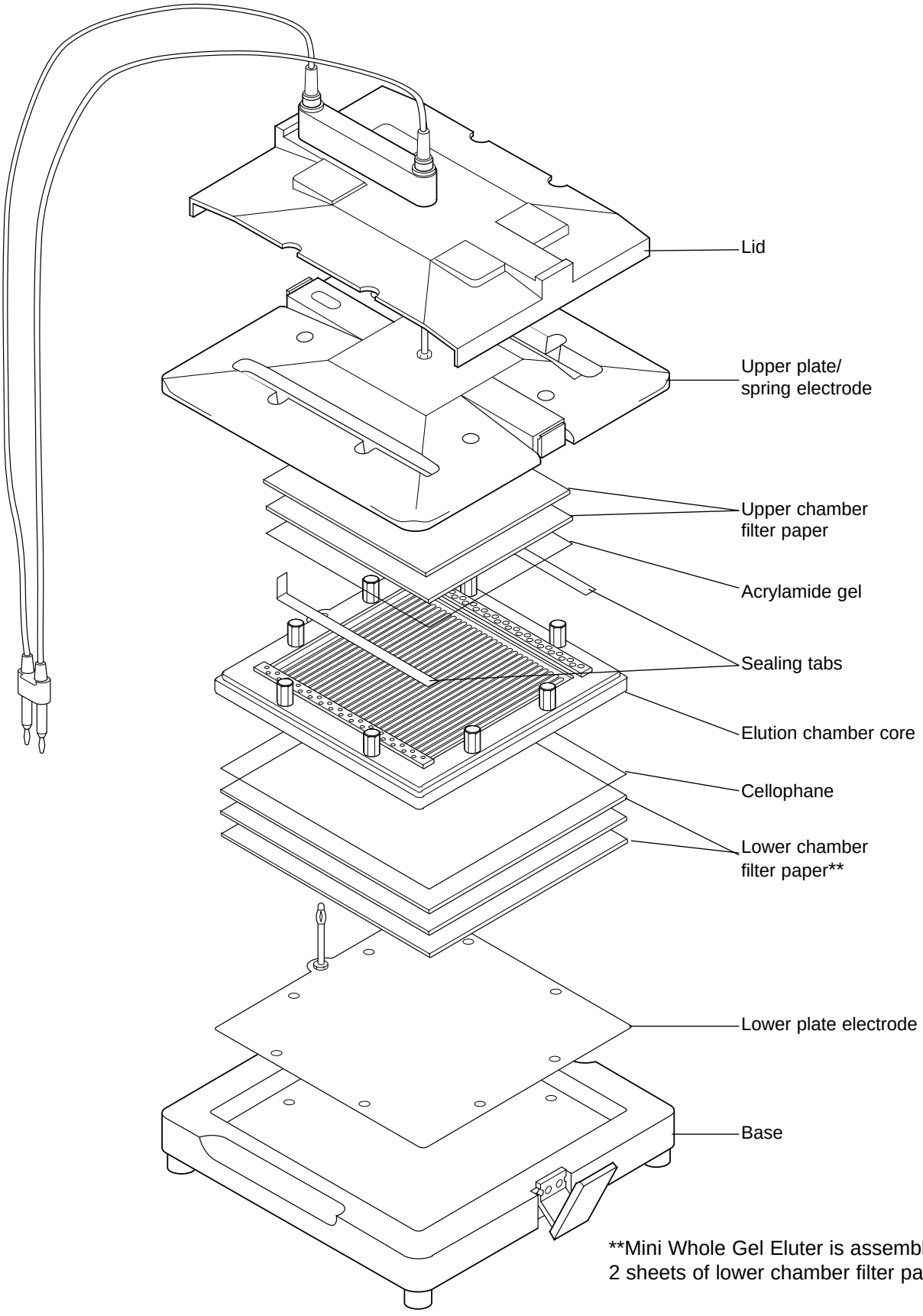
BIO-RAD

Whole Gel Eluter Assembly



**Mini Whole Gel Eluter is assembled with 2 sheets of lower chamber filter paper.

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Whole Gel Eluter and Mini Whole Gel Eluter Assembly Guide

1. Place the base of the eluter on a level surface. Place the leveling bubble in the center of the base and use the adjustable feet to level the base. Insert the lower plate electrode in the depression in the base. Align the electrode with the holes for the screws and electrode stem.
2. Moisten two or three sheets of precut lower chamber filter paper with elution buffer and lay them on top of the lower plate electrode. The mini eluter requires two sheets and the large eluter requires three sheets of filter paper to seal the bottom of the elution chambers.
3. Wet a precut sheet of cellophane (or dialysis) membrane and place it on the blotting paper. Work out all air bubbles with the roller provided.
4. Insert the elution chamber core, aligning the holes for the screws and the electrode stem. **Finger tighten the hex screws in numerical order (crisscross pattern) while pushing down on the core.**
5. Turn the assembly upside down over a sink and shake out any excess buffer squeezed into the buffer overflow channel during the tightening of the screws.
6. Fill the elution chamber with elution buffer so as to cover all of the channels. Carefully remove any bubbles trapped in or around the channels.
7. Lay the preparative gel on a clean flat surface and place the cutting template on top of it. Use the template to outline the portion of the gel to be eluted. The template is made of clear acrylic and has numbered lines with which to align the template with the dye front and molecular markers. Wear clean gloves when handling the gel.
8. Carefully excise the part of the gel within the template with a razor. **Use a downward, chopping motion when cutting the gel.** Drawing the blade through the gel will cause it to tear. It is very important to insure parallel alignment of the protein bands with the chambers of the eluter for sharply defined and reproducible fractionation of proteins. With experience, it should be possible to achieve a high degree of gel-to-gel reproducibility.
9. Starting at one end, gently lay the excised gel in the elution chamber so that the protein bands are parallel to the channels. Do not introduce air bubbles under the gel.
10. Soak two sheets of precut upper chamber filter paper in the elution buffer, then lay them on top of the gel, working out any air bubbles with the roller provided.
11. Blot any excess buffer and thoroughly dry the two raised areas containing the aspiration ports. Seal these ports with the tabs provided or use transparent tape folded back on itself to form a tab.
12. Thread the tabs through the cutouts of the upper plate/spring electrode. Place the upper electrode assembly on top of the chamber, aligning the holes for the screw heads and the stem of the botom electrode. Gently push down while closing the side clamps.

Running the Whole Gel Eluter

1. Place the lid on top of the assembled eluter so that it is fully enclosed. Note that the lid can be placed in only one orientation, so that the anode and cathode connections cannot be reversed.
2. Attach the electrical leads to a suitable power supply with the proper polarity.
3. Apply power to the Whole Gel Eluter to begin the elution. As a safety precaution, do not exceed the voltage and power limits. See Section 4.2 of the instruction manual for specific running conditions.
4. Turn off the power at the end of the elution time. Reverse the polarity of the electrical leads at the power supply. Apply reverse current to the Whole Gel Eluter for 10–15 seconds to dislodge proteins bound to the cellophane (or dialysis) membrane.