Troubleshooting

Problem	Cause	Solution
It is hard to close the lid or the lid can't be closed tightly	1. The lid is not closed properly. 2. Extra Sponge Cushions are placed in the anode tank.	1. Follow the instruction on **Page 14** in the Manual to properly close the lid (figure 1). 2. Use 1 piece of Sponge Cushion when staining 1.5 mm gel; use 2 pieces of Sponge Cushion when staining 0.75 and 1 mm gel.
The stained gel has hazy blue spots.	The gel has not been destained sufficiently.	Invert the eStain® Cathode Pad, cover it back on top of the gel. Perform electric staining for 1 or 2 more minutes (figure 2).
Blue spots observed at the bottom of the stained gel.	1. The spring is missing. 2. The eStain® 2.0 Graphite Electrode is installed in wrong direction.	1. Fix the spring on the contact rod located close to the triangle symbols. 2. Follow the steps described on **Page 18** in the Manual to install the eStain® 2.0 Graphite Electrode in correct direction (figure 3).
Ring-like spots observed on the protein bands.	1. Air bubbles trapped in the assembled staining stack. 2. Small gel pieces attached on the surface of the gel.	1. Use the small shovel supplied with eStain® 2.0 Device to press air bubbles out of the staining stack assembly. 2. Make sure to remove all the gel pieces by washing the gel in distilled water prior to staining.
The stained gel has very faint or nearly invisible protein bands with high blue background.	1. The staining time is not long enough. 2. The graphite electrode has been used for over 100 times.	1. Cover the gel with eStain® Cathode Pad again and then perform electric staining for 1 or 2 more minutes. 2. Replace the worn graphite electrode with a new one.
The stained gel has very faint or nearly invisible protein bands with clear background.	The staining time is too long	Do **Not** stain the gel using eStain® 2.0 System again. Instead, stain the gel using traditional tri-step method.
The left and right status lights flash simultaneously	Excessive current is flowing through the device.	Check if the staining stack is properly assembled and ensure full coverage of the gel.
The right status light doesn't flash during electric staining process	Incomplete electric circuit due to improper assembly of the staining pads.	Ensure the staining stack is assembled correctly: use the eStain® Anode Pad first followed by the gel, and the eStain® Cathode Pad.

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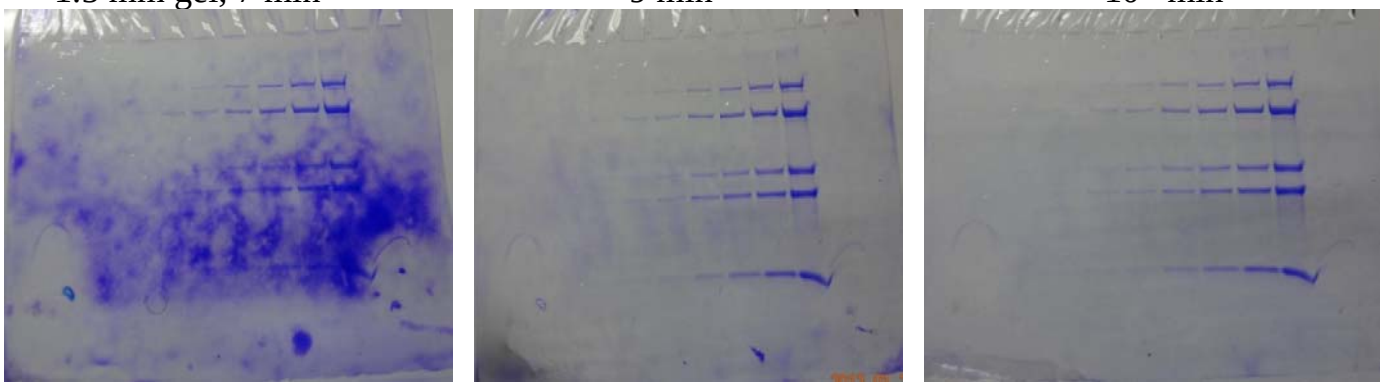
Figure 1.

Press the Open button, then push back and close the lid of eStain® 2.0 Protein Gel Staining Device

Figure 2.

1.5 mm gel, 7 min → 9 min → 10* min



*Generally, 1.5 mm gels take longer time than .75 or 1.0 mm gels to have optimum staining results, plus low temperature (below 22 °C) might require extended time (another 1 to 2 min) . For best staining results, it is recommended to use eStain® 2.0 Protein Staining System at room temperature (22 to 28 °C).

Figure 3.

Switch Off the Device. Open the lid of the device and take the wrongly-installed Graphite Electrode out of the device.

Re-Insert the contact rods of the *Graphite Electrode into* the holes in the anode tank. Make sure that the triangle symbols at the edge of the graphite electrode face the **Open** button, plus the spring on the contact rod located close to the triangle symbols.

Push the eStain® 2.0 Graphite Electrode down gently until you hear a click.

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