

Instructions for using the eStain™ Protein Staining System to perform electric staining of proteins in polyacrylamide gels are described below. For detailed instructions, refer to the manual supplied with the product or download the manual from www.genscript.com.

Assembling the staining stack with eStain™ Pads and pre-run gel

1. Lift up the handle bar to vertical position, then push it forward to open the lid of eStain™ Device.



2. Remove the eStain™ Anode Pad out of the package and place it on the anode plate.



3. Remove the pre-run gel containing your protein samples from gel cassette and rinse the gel with 50 to 100 ml distilled water for 1 minute.

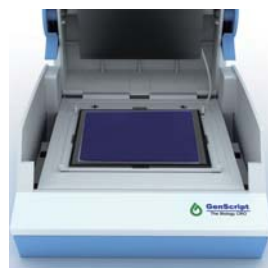
4. Place the gel on the eStain™ Anode Pad and remove air bubbles between gel and anode pad using the small shovel supplied with the device.



5. Place appropriate Gel Window on the gel and ensure that the Gel Window fully cover the margin of the anode pad.



6. Remove the eStain™ Cathode Pad (R-250 or G-250) from the package and place it on the gel.



7. Pull back the handle bar to close the lid of eStain™ Device while keeping the bar vertical to the lid, and then return the bar to horizontal position.



Perform electric staining

1. Press the **Time** button to set appropriate running time based on the gel thickness (see table below).
2. Press the **Start/Stop** button to activate the electric staining program. The running time begins to count down and upper status light keeps flashing during the whole staining program.
3. Current automatically shuts off at the end of each run. The eStain™ Protein Staining Device signals the end of staining with repeated beeping sounds. Upper status light stops flashing and the digital display shows text (000). Press any button on the control panel to stop the beeping.

Gel Thickness	Running Time
0.75 mm	6 minutes
1.0 mm	7 minutes
1.5 mm	9 minutes



Disassembling and cleaning the eStain™ Protein Staining Device

1. Open the lid of eStain™ Protein Staining Device.
2. Carefully separate the stained gel from the staining stack and proceed to be photographed.
3. Discard the used eStain™ Protein Staining Pad. Clean the titanium cathode, graphite anode and surrounding area with a dry cloth or paper towel.

Cooling Graphite Anode and Titanium Cathode

Place the pre-frozen ice pack on the graphite anode, gently close the lid to let the titanium cathode also touches the ice pack.



Replacing the eStain™ Graphite Electrode

1. Press and hold **Time** button for 2 seconds to toggle to numbering mode. Check using frequency of Graphite Electrode.



2. Switch **Off** the eStain™ Protein Staining Device and then open the lid of the device. Use small shovel to pry out the worn Graphite Electrode along the gap at either side of the anode tank.



3. Remove the new Graphite Electrode out of the package, place the new Graphite Electrode into the anode tank and close the lid of the device.



4. Switch **On** the eStain™ Device. Press and hold **Time** button for 2 seconds to toggle to numbering mode. Press **Reset** button to zero the staining times.

