

# InstaStain™ Blue Gel Stain Paper

24825

0901w

## Product Description

### Number

### Description

24825

**InstaStain™ Blue Gel Stain Paper**, 25 (10 cm x 10 cm) sheets

Store at room temperature, protected from light and moisture. Return unused sheets to foil pouch and re-seal.

## Introduction

Since its introduction in the 1960s, Coomassie® dye staining remains the most popular method for protein detection in polyacrylamide gels in use today. A widely recognized disadvantage of Coomassie® dye staining solutions is its tendency to stain lab counters and clothing in addition to the desired target (i.e., the gel!). InstaStain™ Blue Gel Stain Paper eliminates this problem. With InstaStain™ Blue Gel Stain Paper, the Coomassie dye is in a solid phase, thus circumventing the need for preparing or handling liquid staining solutions. This product also facilitates a rapid staining protocol in which protein bands are visible in approximately 1.5 hours. The gel is stained in seconds using a microwave oven and is compatible with virtually any commonly used destaining solution. The results are a crystal-clear background and staining sensitivity down to 10 ng. These features combine to make InstaStain™ Blue Gel Stain Paper the easiest-to-handle Coomassie® dye protein stain option available today.

## Protocol for staining protein gels with InstaStain™ Blue Paper \*

**Note:** Gloves must be worn during this procedure. Avoid touching the blue side of the paper without gloves, as this will affect its ability to stain the gel uniformly.

- 1. Pre-washing:** After electrophoresis, remove one side of the gel cassette/glass plate and set aside. Transfer the plate with the gel to a clean tray and rinse 3 x 5 minutes in deionized water with gentle agitation. Make sure the gel is covered in deionized water.
- 2. Fixing:** Pour off the deionized water from the tray and add a sufficient volume of a standard destain solution to cover the gel (recommended: 40% methanol, 10% glacial acetic acid). Fix the gel for 10 minutes at room temperature without agitation.
- 3. Staining:** Remove the plate with the gel from the destain solution and drain off excess liquid into the tray.

**Note:** Leave the gel semi-wet.

Cut the InstaStain™ Blue Gel Stain Paper to the size of the gel (to ensure optimal contact of the paper to the gel) and place on top of the gel with the blue side down. If necessary, smooth out air pockets with gloved fingers or by gently rolling a pipette over the paper. Moisten 3 pieces of filter paper (cut to the size of the gel) in destain solution and place on top of the InstaStain™ Blue Paper. Place the other half of the gel cassette/glass plate on top of the filter papers. Place this assembly into a microwave oven (500-1000 watts) and heat for 10 seconds on high setting.

**Note:** If the gel assembly is not luke-warm to the touch after 10 seconds, heat in increments of 5 seconds until it is luke-warm to the touch. Be careful not to overheat the gel.

**Note:** InstaStain™ Blue Paper may appear to have darker regions after staining. This will NOT affect the results.

- 4. Destaining:** Remove the top gel cassette/glass plate and all the papers. Transfer the gel to a tray containing twice the volume of the destain solution used in Step 2. Destain the gel for about 1 hour at room temperature with continuous agitation. Protein bands may be visible at this point.

**Note:** Varying the speed of agitation will affect the destain time. Setting the agitation to the point where the gel is just physically moving within the tray gives the fastest overall destain time.

**Note:** Do not destain gels overnight.

- 5. Water Wash Enhancement™ Step:** To maximize the sensitivity potential of InstaStain™ Blue Paper, this optional water wash step is recommended. This step should be performed if a clearer background is desired or there is a need to visualize more weakly stained bands.

Pour off the destain solution from step 4 and add a sufficient amount of deionized water to cover the gel. Wash with water for a minimum of 1 hour or until the desired background clarity is obtained.

**Note:** Gel may be left in deionized water overnight with no loss in sensitivity and band intensity.

\* This procedure was optimized using a 800 watt microwave oven and 1 mm thick gels . For thicker gels, longer destaining times may be required.

## Troubleshooting

### Observation

### Suggestion

Paper adhered to gel  
after microwaving

Place gel and paper into destain solution and gently peel paper from gel.

InstaStain™ is a trademark of Edvotek, Inc.

Coomassie® is a registered trademark of ICI Americas

©Pierce Chemical Company, 6/2000. Printed in the U.S.A.