

# SeeBand Protein Staining solution (Extraction Grade).

*From Gene Bio-Application Ltd.*

Cat. No.	Description
<b>SB010</b>	<b>SeeBand protein staining</b> , 500 ml, sufficient for 20 mini gels

**Storage:** Upon arrival, store at 4°C. Shipped at ambient temperature.

*This product is guaranteed for one year from date of purchase when properly handled and stored.*

## Features

**SeeBand protein staining** solution guarantees protein staining in polyacrylamide gels **with only slight fixation of the protein to the gel**. This unique staining solution allows electro-elution of a desired protein from polyacrylamide gels (e.g. **Gel extraction and dialysis kit** Cat. No. GeBAT012 from Gene Bio-Application Ltd.), with high recovery yield. The staining solution also permits tracking the staining intensity in the course of the staining process with low background. No need for multi-step washing as required with other gel staining **procedures, when using SeeBand protein staining** solution. Washing uses water only, which further enhances staining sensitivity and provides a clear background.

## Before you start

Mix the **SeeBand protein staining** solution vigorously.

**Sensitivity:** 20 ng protein per band.

## Gel staining procedure:

**IMPORTANT:** This protocol is adjusted for 8 x 10 cm mini 10% SDS-PAGE (1 mm thick). Longer procedure is need for thicker or higher-percentage SDS-PAGE.

- 1. Remove stacking gel from the separating gel.**
- 2. Rinse the gel with 300 ml of ultra-pure water 3 x 10 minutes with gentle shaking.**

**Important:** SDS interfere staining procedure; wash thoroughly (see time table for removing SDS from the gel).

Note: If fixation of proteins to the gel is require or **grater sensitivity is preferred (down to 10 ng)**, rinse the gel with 300

ml of ultra-pure water 1 x 10 minutes with gentle shaking, then add 30 ml of fixation solution min in gentle shaking. (30% methanol, 10% acetic acid) for 30

3. Add 20 ml of **SeeBand protein staining** solution to stain an 8 x 10 cm mini gel. Additional reagent may be required if a large tray is being used. Gently shake tray. Stain intensity reaches a maximum within approximately 1 hour. Gels may be stained overnight without increased background.
4. For washing, replace staining solution with ultra-pure water. Several water changes may be necessary for optimal results. This step enhances stain sensitivity.

**Important:** washing over night will reduce staining intensity.

**Notes:**

1. After using **SeeBand protein staining** solution, close tightly the cap and store again at 4°C.
2. For drying the gel after staining use the **Gel drying kit** (Cat. No. GeBAC010 from Gene Bio-Application Ltd.) to avoid gel cracking during drying.

**Time Table for removing SDS from gels**

Gel percentage	Time for shaking in water
Protein gel <14%	10 minutes X 3 in 300 ml water
Protein gel 14%-16%	30 minutes X 3 in 300 ml water
Protein gel >16%	60 minutes X 3 in 300 ml water

**IMPORTANT:** This protocol is adjusted for 8 x 10 cm mini gel 1 mm thick. Longer procedure is need for thicker gel.

**Troubleshooting**

Problem	Cause	Solution
No band development	Gel is > 1 mm thick	Longer immersion in the <b>SeeBand protein staining</b> solution
	Gel has high polyacrylamide concentration	Longer immersion in the <b>SeeBand protein staining</b> solution
	SDS interference	Before staining, wash the gel with plenty of water
Bands are faint after washing	Washing time is too long	Reduce distaining time