PRODUCT INFORMATION

Product name: InstantBlue™ Gel Staining Reagent
Cat. No.: GM49
Size: 500 ml
Store at: 4°C

Introduction:

InstantBlue™ Gel Staining Reagent is a convenient alternative to traditional Coomassie Blue staining procedures, based on a colloidal G250 formulation. This ready-to-use stain contains no methanol, acetic acid and TCA for staining and requires no hazardous solvents for destaining. Protein bands on polyacrylamide gels are visible directly during the staining process just in 3 minutes. After staining, a simple and quick washing with water to yield a clear background, let sensitivity down to 8 ng under standard procedure. The simple procedure saves valuable time by reducing the handling of hazardous materials and solvent waste in your laboratory.

Procedure for staining gels:

1. **Pre-wash:**
   Place the **SDS-PAGE gel** in a clean tray and use **300-400 ml** ultrapure water to wash for 5 min x 3 times with gentle shaking. **For native PAGE,** a simple 5 min pre-wash is sufficient.

2. **Stain: Mix the stain reagent immediately before use by inverting the bottle several times.**
   Decant water and add a sufficient volume of stain reagent to cover the gel completely. For one 8 x 10 cm mini gel, stain with 12-20 ml of stain reagent (depending on tray size) with gentle shaking for 30 min to 1 hr. The signals can be seen directly in the tray in 3 min. You can leave the gel overnight when necessary, which will not affect the sensitivity and background.

3. **Destain-background clearance:**
   Decant stain reagent and add 200 ml ultrapure water for destain with gentle shaking for 1-2 hr. Replace water frequently for 2 to 3 times will increase band intensity in contrast to the background.

Storage of the gel after staining:

You may insert the gel into plastic zip bag with ultrapure water and store at 4°C for several weeks. Do not store the gel at room temperature .

Destain protein bands for MS analysis:

General guidelines are provided below for destaining the protein bands prior to MS analysis. Contact your MS facility or the protein core facility for detailed protocols.

1. Use a clean scalpel to excise the protein band of interest from the gel and destain with 10-30% ethanol or 20-30% acetonitrile for 10-15 min or until clear.
2. Rinse the gel slice in ultrapure water and proceed for MS analysis.

Notes on pre-wash step:

- SDS will inhibit the binding of dye with protein. It is very important to **use large amount of water to remove SDS.** If using **200 ml** water to wash, **10 min x 3 times** wash will be recommended for maximum sensitivity.
- For > 1 mm thicker gel or > 15% gel **10 min x 3 times** wash will be recommended.
- For larger gel, use about 5 ml water per cm^2 gel to wash.

Notes on destain step:

You can use **microwave** or **pre-warmed 50-60°C water** that will result in faster destaining. For larger gel, use 1.5 ml water per cm^2 gel to destain.

- **Microwave procedure**: add 100 ml ultrapure water per mini gel in the microwaveble stray, microwave for 30 sec then gentle shaking for 5 min. Repeat one or two more times to get more clear background.
- **Pre-Warmed water**: add 100 ml pre-warmed 50-60°C water to the gel in the tray, gentle shaking for 5 min. Repeat one or two more times to get more clear background.

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