

iBlue Protein Stain



Cat. No. SJ003-1000M

Size: 1000 ml

Cat. No. SJ003-0030M

Size: 30 ml

Shipped at Room Temperature. Store at 4°C

Description

The iBlue is a ready-to-use reagent, proprietary Coomassie stain that is ultra-fast, sensitive, and safe detection of protein samples. Protein gels can be stained in minutes without wash, fix, and destain. The iBlue provides a result in a low background interference and better signal to noise ratio and may also have a positive impact on the overall resolution and sensitivity. The iBlue formulation is non-toxic and does not contain methanol. Proteins stained using the iBlue stain are also compatible with mass spectrometry (MS) analysis.

Features

- Ready to use format.
- Time efficiency – Result in 15 minutes.
- One step process – No wash, fix, and destain process.
- Safe composition – Nontoxic, no fume hood or solvent disposal required.
- Mass spectrometry compatible – Destainable. No residual methylation or acetylation.

Kit Content

| Contents | SJ003-1000M | SJ003-0030M |
|---------------------|-------------|-------------|
| iBlue Protein Stain | 1000 ml | 30 ml |

Quality Control

The quality of the iBlue Protein Stain is tested on a lot-to-lot basis to ensure consistent product quality.

Required Materials

- Staining container
- Shaker
- For gel drying:
 - ☆ 100 ml of ultrapure water
 - ☆ Microwave
 - ☆ Gel drying solution: 4% glycerol, 20% ethanol in water
 - ☆ Cellophane membranes
- For MS analysis:
 - ☆ Microcentrifuge tubes
 - ☆ Destain solution: 30% ethanol, 30% acetone, or 30% acetic acid
 - ☆ Dry bath (optional)

iBlue Protocol

Standard staining protocol

1. After electrophoresis, remove the gel from the tank and immerse it into the iBlue staining solution. Typically, about 15 mL is needed to cover the gel.
2. Incubation the gel at room temperature for 15 minutes with gentle shaking. Colored protein bands will start to develop and be suitable for cutting bands out for MS analysis.

3. Photograph the gel when the required intensity has been achieved. Gels can be kept in staining solution but ensure that the gel remains covered with iBlue or in ultrapure water after staining for 1 hour in iBlue at least. The gel can be stored in ultrapure water after staining for 1 hour.

Note: The staining solution should not be reused.

Gel dry protocol

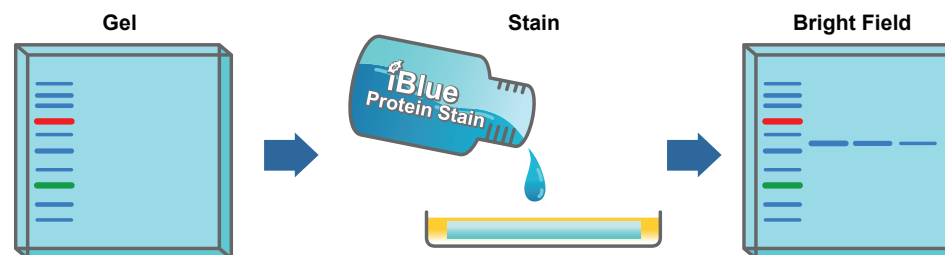
1. Ensure that the gel has been staining for at least 1 hour.
2. Immerse the gel in 100 mL of ultrapure water at about 70°C (heat for 30 to 60 seconds in a microwave oven).
3. Incubate for at least 1 hour while gently rocking. (Gels can be incubated overnight in ultrapure water.)
4. Incubate the gel in a gel drying solution for 2 minutes. Avoid incubation for longer than 5 minutes.
5. The gel is now ready for drying between wetted cellophane membranes.

Bands destain protocol for MS analysis

1. Cut the target band of the gel and transfer to a clean 1.5 ml of microcentrifuge tube.
2. Add 1 ml of destain solution and incubate for 20 minutes (incubate at 60°C – 70°C to increase the rate of destaining).

Note: Acetic acid may result in acetylation of the N terminus.

3. Decant supernatant and repeat steps 2 at least 3 times or until the gel is clear.



Related Ordering Information

| Cat. No. | Description | Size |
|------------|-----------------------------------|------------------|
| SM803-0500 | EVOgel | 500 ml |
| SP006-0600 | BlueRAY Prestained Protein Ladder | 300 µl X 2 vials |
| SP007-0600 | BLUeyey Prestained Protein Ladder | 300 µl X 2 vials |
| SP008-0600 | BLUelf Prestained Protein Ladder | 300 µl X 2 vials |
| SJ001-0010 | Nimble Juice | 10 ml |
| NJ002-0500 | Nimble Juice <i>R</i> TYPE | 500 ml |

Caution

- During operation, always wear a lab coat, disposable gloves, and protective equipment.
- All products are for research use only.
- Colored bands are usually visible after 15 minutes but they are not fixed. The stain would diffuse away from the protein when gel be transferred into water. For better fixation and results, more than one hour staining time is recommended.