

Product Information

Coomassie® Blue Fast Stain, 1X

Catalog Number	Packaging Size
P001	1 L

Storage upon receipt:

- Room temperature

Product Description

Coomassie Blue Fast Stain is a ready-to-use, fast, sensitive, and safe Coomassie G-250 stain. This stain eliminates extensive solution preparation time and expenditure. Unlike traditional Coomassie® stains, Coomassie Blue Fast Stain does not require methanol or acetic acid fixatives or destains. Coomassie Blue Fast Stain is easy to perform and can be completed in 2 hours (Basic protocol) and 20 minutes (Microwave protocol). Destaining is not required, but may be performed to achieve maximum sensitivity, especially when performing downstream analysis such as mass spectrometry is required. Proteins stained using the Coomassie Blue Fast Stain are compatible with mass spectrometry (MS) analysis.

Staining Protocol

Basic Protocol

1. **Run** gels as usual according to your standard protocol.
2. **Rinse** the gels 2 times for 3 minutes with 100 mL deionized water to remove SDS and buffer salts. Discard each rinse.
3. **Stain** the gels with enough Coomassie® Blue Fast Stain to cover the gel. Stain for 1 hour at room temperature with gentle shaking. After incubation, discard the stain.
4. **Wash** the gels with 100 mL of deionized water for 1 hour. The gel can be left in the water for several days without loss of sensitivity. (Optional) To obtain the clearest background for photography, perform a second 1 hour wash with 100 mL of deionized water.
5. **Image** the gels with a white light convertor.

Microwave Protocol

Caution: Do not overheat the staining solutions.

1. **Run** gels as usual according to your standard protocol.
2. **Place** the gels in 100 mL of ultrapure water in a loosely covered container and microwave on high (~1000 watts) for 1 minute until the solution almost boils.
3. **Shake** the gels for 1 minute. Discard the water.
4. **Repeat** steps 2 and 3 of this protocol 2 more times.
5. **Add** enough Coomassie® Blue Fast Stain (~40 mL) to cover the gel, and microwave on high for 1 minute until the solution almost boils.
6. **Shake** the gels on an orbital shaker for 5 minutes.
7. **Wash** the gels with 100 mL of deionized water for 10 minutes on an orbital shaker. (Optional) To improve the detection limit, add 20 mL of 20% NaCl and shake for another 5 minutes.
8. **Image** the gels with a white light convertor.

Destain Protein Bands for MS Analysis

Use the following general guidelines for destaining the protein bands prior to MS analysis.

1. Excise the protein band of interest from the gel using a clean scalpel and destain with 10–30% ethanol or 20–30% acetonitrile for 10–15 minutes or until clear.
2. Rinse the gel piece in ultrapure water and proceed for MS analysis.



Coomassie® Blue Fast Stain

Related Products

Catalog No.	Product
P003A	eLuminol™ Protein Gel Stain (1,000X), 0.5 mL
P003B	eLuminol™ Protein Gel Stain (1,000X), 1.0 mL

For different gel sizes, refer to the following table to determine the volume of water or stain required and follow the **Basic Protocol** for staining.

Gel Size	Water	Stain
8 × 8 cm, 1 mm	100 mL	20 mL
8 × 8 cm, 1.5 mm	150 mL	30 mL
15 × 15 cm, 1 mm	300 mL	60 mL
15 × 15 cm, 1.5 mm	500 mL	100 mL
20 × 20 cm, 1 mm	600 mL	120 mL

For different gel formats and membranes, refer to the following table and follow the **Basic Protocol** using the indicated changes.

Note: Staining nitrocellulose and wet PVDF membranes results in high background and is **not** recommended.

Gel or Membrane	Fix	Rinse	Stain	Wash
1.5 mm NuPAGE® Gels	N/A	150 mL water 2 × 5 minutes 1 × 10 minutes	Basic Protocol, step 3	Basic Protocol, step 4
IEF Gels	100 mL 12% TCA for 15 minutes	Basic Protocol, step 2	100 mL stain for 1 hour	Basic Protocol, step 4
Dry PVDF Membrane	N/A	N/A	10–20 mL stain for 1–2 minutes*	10–20 mL water 3 × 1 minute

*Incubating dry PVDF membranes in stain for >2 minutes results in high background.

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