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# **Product Information**

#### Coomassie Blue Fast Stain, 1X

Catalog Number	Number Packaging Size	
P001A	250 mL	
P001B	500 mL	

# Storage upon receipt:

- Room temperature
- Protect from light

# **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.
- 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**

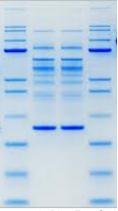
Caution: Do not overheat the staining solutions.

- 1. Run gels as usual according to your standard protocol.
- 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 (~20-30 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.
- 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.
- 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, 250 mL P003B eLuminol Protein Gel Stain, 500 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 x 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 <sup>®</sup> N/A 150 mL water Basic Pr	Basic Protocol,	Basic Protocol, step		
Gels	2 x 5 minutes step 3	step 3	4	
		1 x 10 minutes		
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 x 1 minute

<sup>\*</sup>Incubating dry PVDF membranes in stain for >2 minutes results in high background.

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