AMID BIOSCIENCES

Coomassie ProStain

Catalog # CP-501

Product Information and Manual

Coomassie ProStain is a ready-to-use, fast, sensitive, and safe colloidal Coomassie Brilliant Blue G-250 stain. This stain eliminates extensive solution preparation time and expenditure. Unlike traditional Coomassie® stains, Coomassie ProStain does not require fixatives and destains containing methanol or acetic acid. Coomassie ProStain is easy to perform and can be completed in less than 2 hours (Basic protocol) and 20 minutes (Microwave protocol). Proteins stained using the Coomassie ProStain are compatible with mass spectrometry (MS) analysis.

Special Features

- Fast stain in less than 20 min
- Working Detection Range: ~20 - 500 ng of protein
- Methanol or acetic acid fixatives are not required
- Direct view the protein bands by eye

Applications

Protein gel stain
Working Detection Range: 20-500ng of protein

Storage upon receipt:

- Room temperature
- Protect from light

Basic Staining Protocol:

1. Run gels as usual according to your standard protocol.
2. Rinse the gels 2 times for 5 minutes with 100 mL deionized water to remove SDS and buffer salts. Discard each rinse.
3. Stain the gels with enough Coomassie ProStain to cover the gel. Stain for 1 hour at room temperature with gentle shaking. After incubation, discard the stain.
4. Destain the gel with several changes of distilled water until the background is transparent. The gel can be left in the water for several days without loss of sensitivity.
5. Image the gels with a white light convertor.

Reuse of the staining solution is not recommended

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 ProStain (~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.
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.

Destaining 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.