

Colloidal Coomassie Staining (MacBlue)

Catalogue #: MP002
Storage: RT
Packing Size: 500mL

Principle:

SafeBlue Colloidal Coomassie Blue G-250 stain is a premixed non-hazardous solution specially formulated for rapid, sensitive detection of proteins. SafeBlue is the most sensitive Colloidal Coomassie stain on the market, with the ability to detect less than 10ng protein in a single band. SafeBlue contains no methanol, acetic acid, phosphoric acid or other hazardous components. SafeBlue stain formulation is compatible with all polyacrylamide gel types, and produces lower background staining than competing stains without requiring extensive water de-staining to produce a clear light blue background.

Procedures:

EZ-stain Protocol:

This protocol requires the minimum hands-on time but may require longer staining times for maximum sensitivity.

- Rinse gel briefly in de-ionized water.
- Decant rinse water; add enough SafeBlue solution to completely cover the gel.
- Incubate for at least 6 hours to overnight in staining solution.
- Wash the gel in water.

SureStain Protocol:

Less than 10ng of denatured BSA can be detected by this protocol.

- Wash the gel 3 times with 5 minutes each with de-ionized water on an orbital shaker.
- After the last wash, add enough SafeBlue solution to completely cover the gel.
- Bands containing more than 10ng of protein will be detected within 15 minutes*.
- Remove the stain and wash the gel in de-ionized water**.

* For full sensitivity incubate the gel in the stain for at least 4-5 hours.

** Incubating the gel in water increases the sensitivity of detection by reducing the background to crystal clear.

The gel is stable in water for up to a week without loss of sensitivity. There is no need to store the gel in a salt solution.

HOT Protocol:

25ng of denatured BSA can be detected in 30 minutes. Less than 10ng can be detected after overnight incubation in water, due to a combination of bands binding residual dye and the production of a clear background.

- Heat the gel by microwaving in de-ionized water for 45 seconds to one minute or until the solution starts to boil. Incubate for an additional minute on an orbital shaker.
- Repeat the above step two more times.
- After the last wash rinse the gel in cold de-ionized water. Add enough SafeBlue solution to completely cover the gel. Microwave on high for 45 seconds in two approximately 20 second bursts. Stop if the solution starts to boil. Do not overheat the gel.
- Shake the gel in the stain on an orbital shaker for 5 minutes. Remove the stain and rinse the gel several times. Incubate the gel in water on an orbital shaker until the required contrast/sensitivity is achieved.

For resaech use only