For research purposes only, not for human use

Product Data Sheet

Coomassie Blue Rapid Staining Solution (Decolorization-free)

Catalog #	Source	Reactivity	Applications
CRG1151			SDS-PAGE/Native PAGE

Description

This product improves upon traditional Coomassie Blue stains to deliver rapid, room-temperature staining with high sensitivity. Protein bands at the nanogram level become visible within 10-20 min without requiring fixation, boiling, or destaining. Featuring an eco-friendly, non-toxic, and low-odor formula, it produces minimal background that can be further lowered with a pure water rinse. It is compatible with both SDS-PAGE and native polyacrylamide gels.

Directions for Use

1. After electrophoresis, rinse the gel with deionized water for several minutes to remove impurities and minimize background.

2. Discard the water and add an appropriate volume of this stain to completely cover the gel. Incubate on a horizontal shaker at room temperature for 10–20 min. For samples with low protein abundance, the staining time can be extended appropriately; the optimal duration should be determined based on band visualization. After staining, discard the staining solution and rinse the gel with deionized water to remove residual dye before observation.

3. To further reduce background, replace the deionized water every 20 min and repeat the rinsing process 4–5 times. Alternatively, soaking the stained gel in deionized water overnight can effectively eliminate background and yield clearer protein bands.

Precautions

1. This staining solution contains volatile components. Ensure the container is tightly sealed when not in use to prevent reagent degradation.

2. SDS may interfere with the binding of Coomassie Blue to proteins. For optimal staining, rinse the gel with heated deionized water prior to staining to remove residual SDS.

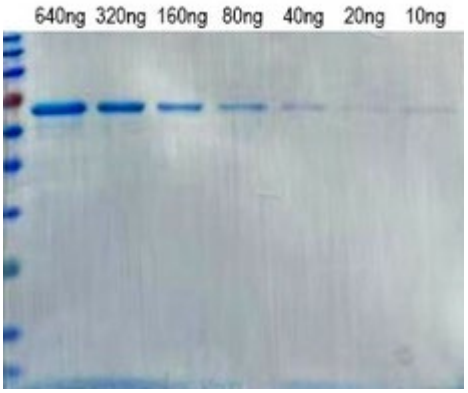
3. Faint or invisible bands after staining typically indicate low protein abundance. To improve visibility, extend the staining duration or increase the pure water rinsing

time before re-evaluation. Additionally, including a positive control (e.g., BSA) during sample loading is recommended to validate staining performance.

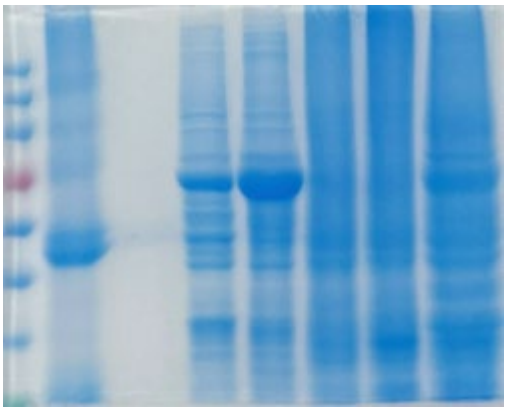
4. To ensure safety, always wear a lab coat and disposable gloves when handling this reagent.

5. For Research Use Only. Not for use in diagnostic procedures.

Storage/Stability Shipped at RT. Store at 4°C and protect from light for 1 year.



BSA was loaded at 640, 320, 160, 80, 40, 20, and 10 ng and subjected to electrophoresis. After electrophoresis, the gel was stained with Coomassie Blue Rapid Staining Solution for 20 min.



Various protein samples were loaded and subjected to electrophoresis. After electrophoresis, the gel was stained with Coomassie Blue Rapid Staining Solution for 20 min.