

Coomassie Brilliant Blue Staining

Working Detection Range: 100-1000ng of protein

Procedure:

All steps are done on a rotary shaker with gentle mixing

1. Following electrophoresis, place the gel in a solution of 40% methanol / 10% acetic acid/ 0.025% Coomassie Brilliant Blue R-250 which has been filtered through Whatman #1 paper. Incubate the gel for 6 hours to overnight in the staining solution.
2. Destain the gel with several changes of distilled water until the background is transparent.

Reuse of the staining solution is not recommended to prevent cross contamination between gels.

Colloidal Coomassie Staining

Working Detection Range: 50-500ng of protein

Prepare a staining solution of colloidal coomassie blue as follows:

1. Mix 16ml ortho-phosphoric acid in 768ml of distilled water. Add 80gm of ammonium sulfate to this solution.
2. Prepare a solution of 5% CBB G250 in distilled water. Add 16ml of this mixture to the solution prepared in step 1.
3. Immediately before use, slowly add 200ml methanol to the solution to give a final concentration of 0.08% CBB G250/ 1.6% ortho-phosphoric acid/ 8% ammonium sulfate/ 20% methanol.

Procedure:

All steps are done on a rotary shaker with gentle mixing.

1. Following electrophoresis, place the gel in the colloidal coomassie staining solution. Do not filter the staining solution prior to use. Incubate the gel for 6 hours to overnight in the staining solution.
2. Destain the gel with several changes of distilled water until the background is transparent.

Reference: Neuhoff V., Stamm R., Eibl H., Electrophoresis 6, 427-448, 1985, modified by A. Posch