

Coomassie Stain of Protein Gel

Hahn Lab, 2001

1. After electrophoresis of protein gel, transfer gel to round staining tray. Add ~200 ml protein gel stain.
2. Microwave for ~45 sec until the solution just starts to boil. Incubate at room temp with gentle shaking for 10-15 min. Heating allows the gel to stain faster.

Alternatively, soak gel in stain for 1 hr at room temperature.

3. Pour stain back into bottle for later reuse. Rinse gel with water. Add ~200 ml protein gel destain. Microwave ~45 sec until the solution just starts to boil. Incubate with gentle shaking at room temp for ~15 min.

Alternatively, soak gel with gentle shaking at room temp ~45 min.

4. Discard destain and add remainder of stain. Microwave as before and incubate with shaking at room temp until gel is destained the desired amount.

Alternatively, the microwave step can be omitted and the gel destained an additional hour or overnight.

Solutions:

Protein gel stain Add to a 500 ml bottle:

1.2 g Coomassie Blue
300 ml Methanol
60 ml Acetic Acid
240 ml H₂O

Shake well and store at room temp. Can be reused numerous times until staining becomes noticeably weaker.

Protein Gel Destain

50 ml Methanol
50 ml Acetic Acid
400 ml H₂O