

RAPID STAINING AND DESTAINING PROTEIN GELS USING COOMASSIE BLUE

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1. Place the protein gel in a plastic container after running SDS-PAGE gel.
2. Cover the gel with 3 to 5 gel volumes isopropanol fixing solution and shake gently at room temperature. (For 0.7mm thick gel, shake 10 to 15 min; for 1.5mm thick gel, shake 30 to 60 min)
3. Pour out fixing solution, cover the gel with rapid Coomassie blue staining solution and shake gently, 30min to 60min at room temperature.
4. Pour out staining solution, cover the gel with destaining solution, shake gently, overnight at room temperature until a clear background is obtained. (If necessary, pour out 10% destaining solution and add more)
5. Photograph the gel.

REAGENT AND SOLUTION

Fixing solution

50%(v/v) methanol

10%(v/v) acetic acid

40% H₂O

Store up to ~1 month at room temperature

Coomassie blue staining solution

50%(v/v) methanol

0.05%(v/v) Coomassie brilliant blue R-250

10% (v/v) acetic acid

40% H₂O

Dissolve Coomassie brilliant blue in methanol before adding acetic acid and water.

Store for up to 6 months at room temperature.

Destaining solution

5%(v/v) methanol

7%(v/v) acetic acid

88% H₂O

Store up to 1 month at room temperature