

## Rapid Coomassie Protein SDS-gel Staining

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### Materials and Reagents

1. Ethanol
2. Acetic acid
3. Coomassie brilliant blue R250
4. Solution I (see Recipes)
5. Solution II (see Recipes)
6. Coomassie stock solution (see Recipes)

### Equipment

1. Microwave
2. Rocker

### Procedure

1. Transfer gel to 50 ml of Solution I.
2. Heat in microwave oven for ~25 sec.
3. Cool in rocker for 5 to 10 min.
4. Add 200  $\mu$ l of Coomassie stock solution to 50 ml of Solution II.
5. Transfer gel to Solution II + Coomassie.
6. Heat in microwave oven for ~35 sec.
7. Cool in rocker for 5 to 10 min.
8. Observe bands on the gel.

*Note: Staining is not complete after these 5 to 10 min and faint bands may take longer to become visible.*

### Recipes

1. Solution I  
50% ethanol  
10% acetic acid
2. Solution II

- 5% ethanol
- 7.5% acetic acid
- 3. Coomassie stock solution
  - 0.25% Coomassie brilliant blue R250 in 95% ethanol

### **References**

1. Studier, F. W. (2005). [Protein production by auto-induction in high density shaking cultures](#). *Protein Expr Purif* 41(1): 207-234.