

Carbonate Silver Stain of Gels

This is a protocol to silver stain SDS page gels without a kit.

1. Fix the gel in 50% ethanol, 12 acetic acid, 0.02% formaldehyde for 1 hour at room temperature.
2. Wash the fixed gel 3x 10 min with 50% ethanol.
3. Incubate for 1 in 0.01% sodium thiosulfate.
4. Wash 3x 15 s in distilled H₂O.
5. Pre-coat the gel for 20 min in 0.1% silver nitrate.
6. Wash 2x 20 s in distilled H₂O.
7. Develop the gel 3-6 min in 3% sodium carbonate, 0.02% formaldehyde, and 0.0002% sodium thiosulfate.
8. Rinse the developed gel 20 s in distilled H₂O.
9. Stop color development by immersion and storage in 0.01M EDTA, pH 8.0.