

Silver Stain

USE A SHAKING PLATFORM FOR ALL STEPS!!!

- fix gel in **50% EtOH, 10% acetic acid** → 1h or better overnight
- incubate in **30% EtOH** → 15min
- wash 3x with **ddH₂O** → 5min each
- sensitize gel with **0.02g Na₂S₂O₃ /100mL** → 1.5min
(freshly prepared, save small amount for the developing solution)
- wash 3x with **ddH₂O** → 0.5min each
- incubate with **160mg AgNO₃ /80mL** → 25min
(in the dark, wrap in aluminium foil)
- wash 3x with **ddH₂O** → 0.5min each
- develop gel with
4.8g Na₂CO₃, 1.6mL of the saved Na₂S₂O₃ solution, 50μL 30% HCHO / 80mL
(in the dark, wrap in aluminium foil) → 15min + (till desired staining is reached)
- stop development by discarding developing solution and incubation in
6mL acetic acid /100mL → 10min
- wash at least 4x with **ddH₂O** → 30min each and then overnight

Recycling:

AgNO₃ solution: Collect, add 1 platelet of NaOH, let precipitate overnight and collect precipitated Ag₂O by filtration (G3)
Dissolve in HNO₃ and recrystallize