

Silver staining

- *Use a clean tray that is only used for silver staining*
- *Keep the tray closed during incubation steps*
- *Wear gloves while handling the gel*

- Briefly rinse the gel with ddH₂O.
- fix for 45 min at RT (H₂O:methanol:acetic acid) (50:40:10)
- wash with ultra pure H₂O for at least 1.5 h (several changes)
- Incubate with 0.02% (w/v) sodium thiosulfate for 3 min
- Wash twice with ultra pure H₂O (2 x 1 min)
- Incubate in 0.1% (w/v) silver nitrate at 4°C for 30 min (in the dark)
- wash twice with ultra pure H₂O (2 x 1 min)
- Develop in 0.04% formaldehyde in 2% (w/v) sodium carbonate (discard developer when it turns yellow and replace with fresh developer)
- stop with 5% acetic acid
- wash with ultra pure H₂O

Solutions needed:

- ❖ 0.1g sodium thiosulfate in 0.5L dest. water
- ❖ 0.5g silver nitrate in 0.5L dest. Water
- ❖ 10g sodium carbonate, 540µl Formalin (= 37% Formaldehyde) in 0.5 l dest water
- ❖ 7.5 ml acetic acid in 150ml dest water