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## Ag-Staining of SDS-Gels

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Contact Gerald N. Rechberger  
Institute of Molecular Biosciences  
Humboldtstraße 50/II  
8010 Graz  
phone: +43 (0)316 / 380-1933  
email: gerald.rechberger@uni-graz.at

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### Chemicals

ddH <sub>2</sub> O	in-house distillery
Ethanol p.a.	Merck UN 1170
Glacial acetic acid	Merck UN 2789
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Sigma S-1648
AgNO <sub>3</sub>	Sigma S-0139
Formaldehyde	Sigma F-8775
Na <sub>2</sub> CO <sub>3</sub>	Merck 6398

### Solutions

Fixing solution	50% H <sub>2</sub> O 40 % Ethanol 10 % Glacial acetic acid
Washing solution	70 % H <sub>2</sub> O 30 % Ethanol
Sensitizing solution	0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> in H <sub>2</sub> O (w/w)
Ag-solution	100mM AgNO <sub>3</sub> in H <sub>2</sub> O 0.02 % (v/v) Formaldehyde
Developing solution	2% Na <sub>2</sub> CO <sub>3</sub> in H <sub>2</sub> O (w/w) 0.04% (v/v) Formaldehyde
Acetic acid	5% in ddH <sub>2</sub> O
Acetic acid	1% in ddH <sub>2</sub> O

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## Procedure

### General remarks

The indicated times are only guidelines, extended washing steps may reduce the background staining and therefore improve the results. Do not touch the gel without wearing (powder-free) gloves.

### Procedure

- Rinse gel in fixing solution for 30 min. (change solution after 20 min)
- Rinse twice each time at least 20 min in washing solution
- Rinse gel in ddH<sub>2</sub>O for 30 min. (change water after 10 min)

*Following working steps should be carried out in cool lab*

- Rinse gel 1 min in wensitizing solution
- Rinse twice each time 30 sec in ddH<sub>2</sub>O
- Rinse gel 20 min in Ag-solution
- Completely remove Ag-solution
- Rinse gel three times each time 15 sec in ddH<sub>2</sub>O
- Rinse gel in developing solution (if necessary change after 3 min)
- Stop the staining process by briefly rinsing with ddH<sub>2</sub>O
- Rinse gel in 5% acetic acid for 5 min

Store the gel in 1% acetic acid at 4°C.