# Cataloguing information

### Title

Coating superfrost microscope slides with gelatin-chromium potassium sulfate

### Description (min 150 words)

This protocol describes how to coat microscope slides with gelatin-chromium potassium sulfate (gelatin-chrom alum) in preparation for histology or immunohistochemical analysis of thin tissue sections. Slides coated with gelatin-chrom alum exhibit much better retention of tissues mounted after free-floating immunohistochemical staining, especially during alcohol and xylene dehydration steps immediately prior to mounting media embedding and coverslipping.

### Has this output been funded by ASAP?

Yes

### Has this output been used in a publication?

No

### Keywords (minimum of 5)

Microscope slide coating, histology, immunohistochemistry, tissue sections, mounting

### DOI (if applicable)

N/A

### Usage notes (i.e. to access will you need to create an account with a particular provider?)

Access provided to ASAP network members through Protocols.io

### Contributors

1. ASAP Teams (e.g. Kirik, Alessi, Scherzer, Lee)
	1. Kirik
2. Labs (e.g. Kirik, Parish, Thompson, Halliday, Sue, Johnston)
	1. Kirik
3. Authors (e.g. Dad Abu-bonsrah, Louise Cottle, Gautam Wali, Adahir Labrador-Garrido)
	1. Benjamin Trist, Alejandra Rangel, Rain Kwan

# Coating superfrost microscope slides with gelatin-chromium potassium sulfate

### Key equipment/consumables/reagents/solutions

Equipment

* Oven
* Heated magnetic stirrer
* Thermometer
* Chemical spatulas
* Slide racks
* Heat resistant beaker compatible with slide racks

Consumables

* Magnetic stirrer bars
* Slide storage box
* Superfrost microscope slides

Key reagents

* Gelatin (Sigma #G2500)
* Chromium potassium sulfate (Merck #101036)

### Experimental Outline

1. Place heated magnetic stirrer in fumehood
2. Pre-heat oven to 42°C
3. Heat 1L dH20 to 50-60⁰C and completely dissolve 10g gelatin with aid of magnetic stirrer
4. Add 1g chromium potassium sulfate - solution should turn a pale green/blue and be completely clear
5. Once dissolved reduce temperature to 40-50⁰C
6. Place slides for coating into designated slide coating rack(s)
7. Dip rack of slides into warm (40-50ºC) gel mixture for approximately 20-30 secs
8. Shake the excess liquid from the rack
9. Repeat steps 7 and 8
10. Place slide rack(s) to dry in the oven at 42°C for 2 days
11. Store slides in dust-free slide storage box
12. Discard Gelatin-Chrom Alum solution into appropriate waste container