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Coating superfrost microscope slides with gelatin-chromium potassium sulfate

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ABSTRACT

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 cover slipping.

ATTACHMENTS

it74bj7ap.docx

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MATERIALS TEXT

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 –**
  Aldrich Catalog #G2500 .
  Chromium potassium sulfate **Merck**
- **Millipore Catalog #101036** .

Experimental Outline 2d 0h 0m 50s

Place heated magnetic stirrer in fume hood.

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1

2 Pre-heat oven to **42 °C** .

3 Heat **1 L** dH20 to **50 °C** - **60 °C** and completely dissolve **10 g** gelatin with aid of magnetic stirrer.

4 

Add **1 g** chromium potassium sulfate - solution should turn a pale green/blue and be completely clear.

5 Once dissolved reduce temperature to **40 °C** - **50 °C** .

6 Place slides for coating into designated slide coating rack(s).

7 Dip rack of slides into warm (**40 °C** - **50 °C**) gel mixture for approximately **00:00:20** - **00:00:30** .
50s

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 **48:00:00** .
2d

11 Store slides in dust-free slide storage box.

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12 Discard Gelatin-Chrom Alum solution into appropriate waste container.

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