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TECHNICAL DATA SHEET 893

Page 1 of 1

Fontana Masson Stain Kit

PURPOSE

To identify argentaffin granules and melanin. Melanin is a nonlipid, nonhematogenous pigment. It is a brown-black pigment present normally in the hair, skin, retina, iris and certain parts of the CNS. Argentaffin granules are found in carcinoid tumors.

PRINCIPLE

A positive argentaffin reaction means the cells take-up silver and then reduce it to a visible metallic state, without the aid of a reducing agent.

CONTROL

A nevi for melanin, or small intestine for argentaffin.

FIXATIVE

10% formalin

TECHNIQUE

Cut paraffin sections 4 μ

EQUIPMENT

Acid cleaned glassware, microwave oven (or 60°C oven), microscope

REAGENTS

AMMONIACAL SILVER-STOCK SOLUTION

10% Silver nitrate 25.0 ml

Add ammonium hydroxide drop by drop, until solution precipitates and clears again.

10% silver nitrate 1.0ml

Solution will become slightly cloudy, allow to remain undisturbed for 4-24 hours. Discard after use.

AMMONIACAL SILVER-WORKING SOLUTION

*Ammoniacal silver stock solution 12.5ml

Distilled water 37.5ml

Pipette the ammoniacal silver off the top, leaving the precipitate on the bottom.

Filter. Discard after use.

CAUTION

*Corrosive-Avoid contact and inhalation

KIT CONTAINS

-25104A-10% Silver Nitrate, 500ml

-25104B-0.1% Gold Chloride, 500 ml

-25104C-100ml Ammonium Hydroxide, 28-30

-25104D-Nuclear-Fast Red, 500ml

-25104E-5% Sodium Thiosulfate, 500ml

PROCEDURE

1. Deparaffinize and hydrate to distilled water.
2. *Working Silver Solution, microwave 20 power, 2 minutes. Check slides microscopically for adequate intensity, place in microwave a few seconds longer if needed.
3. Rinse in distilled water.
4. 0.1% Gold chloride, 10 minutes.
5. Rinse in distilled water.
6. 5% Sodium Thiosulfate, 5 minutes.
7. Wash in tap water, rinse in distilled.
8. Nuclear-fast red, 5 minutes.
9. Wash in tap water.
10. Dehydrate, clear, and coverslip.

*Conventional Method: Place in 60°C oven for 1 hour.

RESULTS

Melanin, argentaffin cells black

Nuclei red

REFERENCES

Sheehan D, Hrapchak B, Theory and practice of Histotechnology, 2nd Ed,

ORDERING INFORMATION

Cat. #	Description	Sizes
25104	Fontana Masson Stain Kit	1 kit

Order online anytime at www.polysciences.com

TO ORDER

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