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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 4µm

## EQUIPMENT

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

## REAGENTS

### AMMONIACAL SILVER-STOCK SOLUTION

10% Silver nitrate 25 ml

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

10% silver nitrate 1ml

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

-500ml - 10% Silver Nitrate

-500ml - 0.1% Gold Chloride

-100ml - Ammonium Hydroxide, 28-30%

-500ml - Nuclear-Fast Red

-500ml - 5% Sodium Thiosulfate

## 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

Argentaffin Cells: Black

Melanin: Black

Nuclei: Pink

## REFERENCES

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

## TO ORDER

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