



## Argentaffin Stain Kit, Fontana-Masson

### Solutions Provided:

- #SSC1121-250 - **Silver Nitrate, 10%**
- #SSC1045-250 - **Ammonium Hydroxide, 28%**
- #SSC1080-250 - **Gold Chloride, 0.2%**
- #SSC1131-250 - **Sodium Thiosulfate, 5%**
- #SSC1099-250 - **Nuclear Fast Red**

Working solution preparation (*prepare just before use*):

### Fontana Silver Solution

Place 25mL of Silver Nitrate, 10% into an appropriate container and add Ammonium Hydroxide, 28% drop by drop until the solution becomes clear. Add more Silver Nitrate, 10% drop by drop until the clear solution again becomes slightly cloudy. If possible, let the solution stand for several hours. When ready for use, filter the solution and dilute 20mL of the Fontana Silver Solution with 40mL of distilled water. Use immediately and discard after each use.

### Conventional Procedure

1. Deparaffinize and hydrate sections through alcohol to distilled water.
2. Place slides in the **Fontana Silver Solution** in a 56° C waterbath for **1 hour**. Check slides microscopically and return to the heated Fontana Silver Solution if necessary. This step is complete when granules are dark brown against a colorless background.
3. Rinse slides well in 3-4 changes of distilled water.
4. Place slides in **Gold Chloride, 0.2%** for **10 minutes**. The Gold Chloride, 0.2% may be reused.
5. Rinse slides well in distilled water.
6. Place slides in **Sodium Thiosulfate, 5%** for **5 minutes**.
7. Rinse slides well in distilled water.
8. Counterstain in **Nuclear Fast Red** for **5 minutes**.
9. Thoroughly wash slides in several changes of distilled water or for at least 1 minute in running tap water.
10. Dehydrate in 2-3 changes of 95% alcohol followed by 2-3 changes of 100% alcohol.
11. Clear and mount with appropriate mounting medium.

### Results:

Melanin:	Black
Argentaffin Granules:	Black
Nuclei:	Pink