

## Masson Fontana Stain Kit

IN VITRO DIAGNOSTIC DATASHEET

*This kit is used to demonstrate Melanin in tissue but can also demonstrate argentaffin cell granules and lipofuscins.*

**INTENDED USE :** IN VITRO DIAGNOSTIC USE

**DESCRIPTION :** Based on the Fontana 1912 : Masson 1914 method, this kit is used to demonstrate melanin in tissue but can also demonstrate argentaffin cell granules and lipofuscins. The principle of the Masson Fontana is based upon a reducing silver technique. Melanin and melanin precursors are capable of reducing silver and acid ferricyanide solutions. Hence this technique will also demonstrate staining in argentaffin cell granules and lipofuchsin.

**SPECIMEN COLLECTION :**

Formalin Fixation is essential for argentaffin substances but not critical for melanin. Tissues should be processed and embedded in paraffin wax and cut at 5 microns.

**REAGENTS :** **150 TEST**

Ammonia Solution 33%	1x 50ml
Silver Nitrate 10% Solution	1x 50ml
Sodium Thiosulphate 5% Solution	1x 50ml
Neutral Red 0.1% Solution	1x 50ml

*\* Number of TEST calculated according to 330 microliter per slide.*

**CATALOG NO** **PLKit12-150**

**MICROBIOLOGICAL STATE :** This product is not sterile.

**PROCEDURE TIME :** Approximate 60 minute.

**PROTOCOL :**

**PREPARATION OF AMMONIACAL SILVER SOLUTION**

- Place 20ml of 10% aqueous silver nitrate solution in a glass flask.  
Using a fine-pointed dropper pipette, add concentrated ammonia drop by drop, constantly agitating the flask until the formed precipitate almost dissolves.
- This titration is critical if the method is to work consistently well.
- The end point of the titration is seen when a faint opalescence is present, and is best viewed using reflected light against a black background.
- If too much ammonia is inadvertently added then the addition of a few drops of 10% silver nitrate will restore the opalescence.
- To this correctly titrated solution add 20ml triple distilled water and then filter into a dark bottle.
- Ammoniacal silver solutions are potentially explosive if stored incorrectly.
- Store the solution in the refrigerator (2-8°C) and use within 4 weeks

1. Dewax sections, hydrate through alcohols and rinse in tap water
2. Wash well in distilled water
3. Treat with the ammoniacal silver solution in a clean Coplin jar, which has been covered with aluminium foil, for 30-40 minutes at 56°C. Check microscopically until staining is achieved.
5. Treat sections with 5% aqueous sodium thiosulphate (hypo) for 1minute
6. Wash well in running tap water for 2-3 minutes
7. Counterstain in 0.1% neutral red for 1 minute
8. Rinse in running water and blot dry
9. Dehydrate rapidly, clear and mount

## RESULTS :

**Nuclei :** Red

**Melanin :** Black

**Argentaffin cell granules, chromaffin, some lipofuchsins :** Black

**STORAGE AND STABILITY :** This product is stable for 36 months when stored in +2 / +8 C

**TROUBLESHOOTING :** Please contact Patolab Technical Support by e-mail ( [patolab@patolab.com.tr](mailto:patolab@patolab.com.tr) ).