

G-484 FONTANA – MASSON SILVER METHOD

FIXATION: Formalin, 10% Buffered Neutral (F-113)

SECTION: Paraffin @ 6 microns

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Stain in Working Fontana Silver Nitrate (dilute 1 volume Silver Nitrate, (G-484-1) with 3 volumes distilled water and filter) at 56°C, 1 hour. Sections should be light brown. Rinse sections in distilled water.
*To prepare **Fontana Silver Nitrate**, (G-484-1), add **Ammonium Hydroxide**, (G-484-1B) dropwise to 95ml of **Silver Nitrate, 10%**, (G-484-1A), while stirring or shaking vigorously, until the forming precipitate is just dissolved. Do not add excess Ammonium Hydroxide. Add Silver Nitrate 10% dropwise while stirring until the solution is slightly cloudy. Let stand overnight in well sealed amber glass bottle before using. Store in refrigerator. (Note: Use chemically clean glassware!)
3. Tone in **Gold Chloride, 0.2%**, (G-484-2) for 10 minutes. Rinse in three changes of distilled water.
4. Place in **Sodium Thiosulfate, 5%**, (G-484-3) 5 minutes, and rinse in two changes of distilled water.
5. Counterstain in **Nuclear Fast Red**, (G-484-4) 5 minutes, and rinse in two changes of distilled water.
6. Dehydrate in two changes 95% Alcohol and 100% Alcohol, clear in two changes **Xylene**, (C-120).
7. Mount with **Permount** (M-18).

RESULTS:

Silver reducing substances.....black
Nuclei.....pink

REFERENCES:

Masson, P.: Amer. J. Path., 4:181 (1928), AFIP Manual of Histologic Staining Methods, 3rd., G. Luna: McGraw-Hill Publications, c. 1968, p. 104.