

E-312 McMANUS PAS METHOD FOR GLYCOGEN

FIXATION: **10% Buffered Neutral Formalin**

SECTION: Paraffin, @ 6 microns

STAINING PROCEDURE: Digest using a diastase, hyaluronidase, or sialidase procedure.

1. Deparaffinize and hydrate to distilled water.
2. Oxidize in **Periodic Acid, 0.5%**, (E-312-3), 5 minutes and rinse in distilled water.
3. Stain in **Coleman's Feulgen**, (E-312-1) or **Schiff's Reagent**, (E-312-1A), 15 minutes and wash in running water to develop the pink color, 10 minutes.
4. Counter-stain in **Harris Hematoxylin**, (E-312-2B), 6 minutes, or **Light Green Working Solution**, (E-312-2A) 5-10 seconds. Light Green is better used when delineation of fungi is required. Prepare the working solution by diluting **Light Green, 0.2% Solution**, (E-312-2) 1:5 with distilled water; proceed to step #7, dehydration. Tap water and ammonia decolorize Light Green.
5. Wash in running water and transfer to **Acid Alcohol, 1%**, (E-312-4), for 3-10 quick dips. Wash again in distilled water.
6. Dip in dilute **Ammonia Water, 0.3%**, (E-312-5), to blue the sections and again wash in running water for ten minutes.
7. Dehydrate in 95% alcohol and 100% alcohol, clear in Xylene, two changes each.
8. Mount.

RESULTS:

Nuclei.....blue
Fungi.....red
Background, when Light Green
Is used as the counter-stain.....green, pale

REFERENCES:

McManus, JFA: Stain Tech.; 23: 99 (1948).

AFIP Manual of Histologic Staining Techniques; L.G. Luna, 3rd ed. ed.; New York: McGraw-Hill Publications, c. 1968, p. 160.

Mowry, RW: Annals of the New York Academy of Science; 106: 402 (1963).