

E-311 BAUER'S METHOD FOR GLYCOGEN

Fixation: Alcoholic Formalin II, (F-128), FAA, (F-119) or Neutral Formalin, 10% (F-114).

Sections: Paraffin

Staining:

1. Deparaffinize through 2 changes each of xylene and absolute alcohol to 1% Celloidin, in Acetone:Alcohol, 1:1 for 5-10 minutes. Drain on edge for 1 minute and then harden in 80% alcohol for 5 minutes or longer.
2. Wash in water and place in **Chromic Acid, 5%** (E-311-5) for 1 hour, pouring in and out of Coplin jar each 10 minutes. Wash in running water for 5 minutes.
3. Stain in **Schiff's Reagent** (E-311-1) for 15 minutes in a covered Coplin jar, agitating every 3-5 minutes.
4. Wash in three changes of **Sodium Bisulfite, 0.05M**, (E-311-6) 90 seconds each change. Wash in running water for 10 minutes.
5. Counterstain in **Mayer's Acid Hemalum** (E-311-2) for 2 minutes.
6. Blue in tap water containing 2-3 drops of saturated aqueous **Sodium Carbonate** (E-311-7).
7. Dehydrate, clear in **Xylene-Alcohol, 1:1** (C-122) and 2 changes of **Xylene**, (C-120) and mount in synthetic resin.

Stain Results:

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| Glycogen | Purplish red |
| Cartilage matrix | Deep purple |
| Chitin | Red-purple |
| Mucin | Purplish-pink |
| Cellulose | Red-purple |
| Nuclei | Blue |

References:

Bensley, C.M., *Stain Techn.*, 14:47-52, 1930

Bauer, H., *Z. Mikr. Anat. Forsch.*, 33:143-160, 1933

Clark, G., (ed.), Staining Procedures, 3rd ed., Williams & Wilkins, Baltimore, P. 151, c1973

