

G-454, ALDEHYDE-FUCHSIN METHOD

FIXATION:

Buffered Neutral Formalin, 10% (F-113) or **Bouin's Fixative** (F-40) - avoid dichromate and mercury containing fixatives if possible to suppress the background staining.

SECTIONS: Paraffin, 3-5 microns

STAINING:

1. Deparaffinize and hydrate to distilled water.
2. Remove mercury precipitate with **Lugol's Iodine Solution** (G-454-1), (10 min. to 1 hr.).
3. Remove iodine with **Sodium Thiosulfate, 5% Solution** (G-454-2).
4. Wash in running tap water for 5 minutes.
5. Rinse in distilled water.
6. Place slide in 70% alcohol for 3 minutes.
7. Stain in **Aldehyde-Fuchsin Solution** (G-454-3) for 5 minutes to 2 hours or longer. When sufficiently dark, remove excess stain with several changes of alcohol. Do not expose the slide to dilute alcohols or water until excess stain has been removed, or precipitation will occur. After staining and alcohol washes are complete, the slide can be exposed to aqueous solutions. The stain can be extracted slowly from sections with acid alcohol only if the stain has not aged more than 3-4 days before use, otherwise the stain is very difficult to remove.
8. If desired, counterstain with nuclear stain.
9. Dehydrate in absolute alcohol.
10. Clear and mount.

STAIN RESULTS:

Purple

Beta cell granules, elastic fibers,
mucus, and mast cell granules

Colorless

Background

REFERENCES:

Clark, G.: Staining Procedures, Williams and Wilkins Company, Baltimore, 3rd ed., c. 1973, p.175.
Gomori, G.: Aldehyde-Fuchsin: A New Stain For Elastic Tissue, Am. J. Clin.Path., 1950 20:665-6