ALCIAN BLUE- PAS (PAB)

**PURPOSE:** To differentiate between neutral and acetic mucosubstances. Routine stain for G.I. biopsies.

**CONTROL:** Use a mucin control.

**FIXATIVE:** 10% formalin or Hollande's fixative.

**TECHNIQUE:** Cut paraffin sections 4-5 microns thick.

**EQUIPMENT:** Rinse glassware in DI water. Coplin jar, microwave oven.

**REAGENTS:**
- **Alcian Blue, pH2.5:** See Alcian Blue
- **Schiff's Reagent:** See PAS
- **0.5% Periodic Acid:** See PAS
- **Hematoxylin Gill-3:** Purchased through Baxter

**SAFETY:** Wear gloves, goggles, particle mask and lab coat, avoid contact and inhalation. Work under the hood, keep hot, uncapped, solutions under the hood.

Schiff’s Reagent: Use extreme caution, Basic fuchsin (pararosaniline) is a known carcinogen.

**PROCEDURE:**
1. Deparaffinize and hydrate to distilled water.
2. *Alcian blue pH2.5, microwave Hi power, 45 seconds, let stand for 2-5 minutes.
3. Wash in running tap water, 5 minutes, rinse in distilled.
4. 0.5% Periodic acid, 5 minutes.
5. Rinse in distilled water.
6. *Schiff’s reagent, microwave Hi power, 45 seconds, allow to stand for 2-5 minutes.
7. Wash in running tap water for 5 minutes, rinse in distilled.
CARBOHYDRATES

ALCIAN BLUE- PAS

8. Hematoxylin, 1-3 minutes, wash in water.
9. Acid rinse, 10 dips, wash, bluing solution, 10 dips.
10. Wash in running tap water for 5 minutes.
11. Dehydrate, clear, and coverslip.
   *Conventional Method: Alcian blue, 30 minutes, room temperature.
   *Schiff's reagent, 30 minutes, room temperature.

RESULTS:
Acid mucosubstances blue
Neutral polysaccharides magenta

REFERENCES:
Carson F, Histotechnology A Self-Instructional Text, 1st Ed, 1990,pp130-131, ASCP, Ill
Crookham, J, Dapson, R, Hazardous Chemicals in the Histopathology Laboratory, 2nd ED, 1991, Anatech LTD

Prepared:______________________By: ________________

Approved:______________________By: ________________

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PROCEDURE CARD

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RESULTS:
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SAFETY: Keep opened hot solutions in hood.

REAGENTS:
**Alcian Blue, pH2.5:**
See Alcian Blue

**Schiff’s Reagent:**
See PAS

**0.5% Periodic Acid:**
See PAS

**CAUTION: Carcinogenic.**

**Hematoxylin Gill-3:**
Purchased through Baxter
ALCIAN BLUE  pH2.5
DATE:_____________
TECH:_____________

0.5% PERIODIC ACID
DATE:_____________
TECH:_____________

SCHIFF’S SOLUTION
DATE:_____________
TECH:_____________