## Alcian Blue Stain, pH 2.5

<table>
<thead>
<tr>
<th>Final Approval:</th>
<th>May 2010</th>
<th>Effective:</th>
<th>May 2010</th>
<th>Next Review Date:</th>
<th>January 2013</th>
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</thead>
</table>

| Stakeholder Name(s): | Shelly M. Siegel HT | Date: 8/25/10 | Reviewed | Revised | |
|----------------------|---------------------|---------------|----------|---------| |
| Stakeholder Name(s): | Mark Magilner MD | Date: 8/27/10 | Reviewed | Revised | |
| Stakeholder Name(s): | Shelly Siegel | Date: 5/9/11 | Reviewed | Revised | |
| Stakeholder Name(s): | Shelly M. Siegel HT | Date: 1/9/2012 | Reviewed | Revised | |

### Describe briefly the most recent revision made to this policy, procedure or protocol & why:

New Procedure

### Purpose/Policy Statement:

For diagnostic purposes, to demonstrate the presence of acidic mucins and acid mucosubstances

### Definitions:

- n/a

### STEPS / KEY POINTS

**PROCEDURE:**

1. Deparaffinize and hydrate sections to DH2O.
2. Stain in Alcian Blue solution for 30 min.
3. Running tap H2O rinse for 2 min.
4. Counterstain in Nuclear Fast Red for 3 min.
5. Brief tap H2O rinse.
6. Dehydrate, clear and mount with synthetic medium.

**CALCULATIONS:** N/A

**CALIBRATION:** pH Alcian Blue stain solution. (2.5)

**QUALITY CONTROL:** Each time the procedure is performed a known acid mucosubstance containing positive tissue slide labeled with the current date and "ALCIAN BLUE CONTROL" shall be stained simultaneously with the patient slide(s). Control tissue used will be two types- small bowel and stomach.

**PROFICIENCY TESTING:** College of American Pathologists HistoQIP.

**RESULTS:**

Carboxylated and sulfated acid mucosubstances, acidic mucins - blue.
Nuclei - pink-red.
Cytoplasm - pale pink.

**PROCEDURE NOTES:** N/A

**LIMITATIONS OF PROCEDURE:** NONE.
Equipment/Supplies (If Applicable):

SPECIMEN: Paraffin sections cut at 4 microns and mounted on glass microslides.

MATERIALS, REAGENTS:

| Equipment/Supplies (If Applicable): |
| SPECIMEN: Paraffin sections cut at 4 microns and mounted on glass microslides. |

MATERIALS, REAGENTS:

| MATERIALS, REAGENTS: |
| 3% Glacial Acetic Acid | Alcian Blue |
| DH₂O . . . . . . 485 ml | 3% Glacial Acetic Acid . . . 50 ml |
| Glacial Acetic Acid . 15 ml | Alcian Blue 8GX . . . . 0.5 gm |
| pH to 2.5 | Nuclear Fast Red (Kernechtrot) |
| Add thymol crystal as preservative. | American Master Tech Scientific |
| Solution is stable for 60 days. |

CAUTION: IRRITANT
Wear appropriate protective equipment.

INSTRUMENTATION OR EQUIPMENT: pH Meter.

Form Name & Number or Attachment Name (If Applicable):
histo01

Author Position:
Lead Histologist

Review/Revision Authority (Position Not Individual Name): Lead Histologist

Expert Consultant Position/s (Not Individual Name/s):
N/A

References (Required for Clinical Documents):


MANUFACTURER’S PACKAGING BROCHURE/INSERT: NONE.

Is there a Regulatory Requirement? Yes ☐ No ☐

If yes, insert requirement information here:

Review History (No Changes):
N/A

Revision History (Note changes in area under header):
N/A

Computer Search Words:
N/A

Policy, Procedure or Protocol Cross Reference Information:
N/A

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