



# Instructions For Use

## APS-IFU

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## Alcian Blue – PAS Stain Kit

### Description and Principle

The Alcian Blue - PAS Stain Kit is intended for use in the simultaneous histological visualization of sulfated and carboxylated acid mucopolysaccharides, sulfated and carboxylated sialomucins and neutral mucins.

Alcian Blue, a copper phthalocyanine dye, binds acid mucosubstances. When used in a pH 2.5 acid solution Alcian Blue stains sulfated and carboxylated acid mucosubstances. Neutral mucins are stained with a standard Periodic Acid Schiff (PAS) reaction. Neutral mucins are oxidized by Periodic Acid forming free aldehydes capable of binding Schiff's Solution resulting in a magenta end product. Hematoxylin is provided as a nuclear counterstain.

### Expected Results

Acidic Sulfated Mucosubstances:	Blue
Hyaluronic Acid:	Blue
Sialomucins:	Blue
Neutral Mucins:	Magenta
Mixtures of Acidic and Neutral Mucins:	Blue - Mauve depending on dominant entity

### Kit Contents

1. Acetic Acid Solution (3%)
2. Alcian Blue Solution, pH 2.5
3. Periodic Acid Solution (1%)
4. Schiff's Solution
5. Hematoxylin, Mayer's (Lillie's)

### Storage

- 18-25°C
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- 2-8°C
- 2-8°C
- 18-25°C

### Suggested Controls (not provided)

Small or large Intestine, Appendix, Colon

### Uses/Limitations

For In-Vitro Diagnostic use only.  
Do not use if reagents become cloudy or precipitate  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile  
Intended for FFPE sections cut at 5-10µm.  
This procedure has not been optimized for frozen sections.  
Frozen sections may require protocol modification.

### Storage

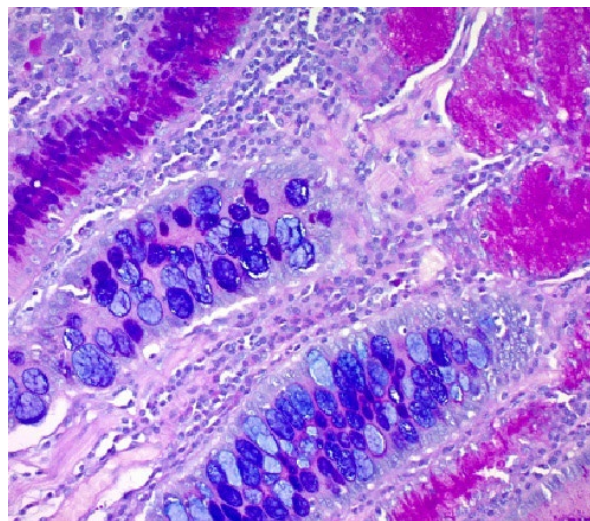
Mixed storage conditions. Store according to individual label instructions.

### Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

### Procedure (at Room Temperature)

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Apply Acetic Acid Solution (3%) to tissue section for 2 minutes.
3. Remove excess Acetic Acid Solution (3%) and without rinsing apply Alcian Blue (pH 2.5) solution for 15-20 minutes.



Neutral and Acid Mucins on Human GI demonstrated with Alcian Blue (pH 2.5) and PAS. Magnification 200X

4. Rinse for 2 minutes in running tap water followed by 2 changes of distilled water.
5. Apply Periodic Acid Solution to tissue section for 5 minutes.
6. Rinse slide in 2 changes of distilled water.
7. Apply Schiff's Solution to tissue section for 10-20 minutes.
8. Rinse for 2 minutes in warm running tap water followed by 2 changes of distilled water.
9. Apply Hematoxylin, Mayer's (Lillie's Modification) to tissue section for 2 minutes.
10. Rinse for 2 minutes in running tap water followed by 2 changes of distilled water.
11. Dehydrate through graded alcohols.
12. Clear, and mount in synthetic resin.

### References

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