# Diagnostic **BioSystems**

## Instructions For Use **KT 003-IFU**

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### Alcian Blue (pH 2.5) Stain Kit

#### **Description and Principle**

The Alcian Blue (pH 2.5) Stain Kit is intended for use in the histological visualization of sulfated and carboxylated acid mucopolysaccharides and sulfated and carboxylated sialomucins (glycoproteins).

Alcian Blue, a copper phthalocyanine dye, binds acid mucopolysubstances. When used in a pH 2.5 acid solution Alcian Blue stains both sulfated and carboxylated acid mucosubstances.

#### **Expected Results**

Acidic Sulfated Mucosubstances:	Blue
Hyaluronic Acid:	Blue
Sialomucins:	Blue
Nuclei:	Red
Background:	Pink

#### Kit Contents

Kit Contents	Storage
1. Alcian Blue Solution (pH 2.5)	15-30°C
2. Nuclear Fast Red (Enhanced Stability)	15-30°C
3. Acetic Acid Solution	15-30°C

#### Suggested Controls (not provided)

Small 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

Store kit and all components at room temperature (15-30°C).

#### Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements. If there is any serious incident that has occurred in relation to the device, please contact the manufacturer: Diagnostic BioSystems Technical Support at (925) 484-3350, extension 2 or techsupport@dbiosys.com. If required, please report to the Competent Authority of the Member State in which the user and/or patient is established.

#### Procedure

1. Deparaffinize sections if necessary and hydrate to distilled water.

2. Incubate slide in Acetic Acid solution for 3 minutes.

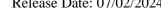
3. Stain tissue section with Alcian Blue Solution (pH 2.5) solution for 30 minutes at room temperature or 15 minutes at 37° C.

4. If desired, rinse slide briefly in Acetic Acid solution to remove excess Alcian Blue.



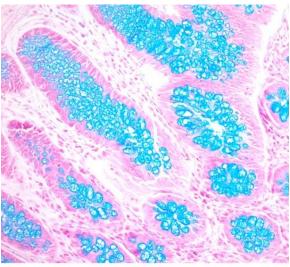






5. Rinse for 2 minutes in running tap water followed by 2 changes of distilled water.

6. Stain tissue section with Nuclear Fast Red Solution (Enhanced Stability) for 5 minutes.



Alcian Blue Solution (pH 2.5) staining on Normal Human Colon. Magnification 200X

7. Rinse for 2 minutes in running tap water followed by 2 changes of distilled water

8. Dehydrate through graded alcohols.

9. Clear, and mount in synthetic resin.

#### References

1. Lillie, R.D. 1977, H.J. Conn's Biological Stains, 9th Edition. Williams & Wilkins, Baltimore. Pages 452-455.

2. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. Battelle Press, Columbus, OH. Pages 172-173.

3. Churukian, C.J., 1989, Manual of Special Stains Laboratory, 4th Edition. University of Rochester, Rochester, New York. Pages 55-56.

4. Carson, F.L., 1996, Histotechnology; A Self-Instructional Text, 2nd Edition. ASCP Press, Chicago, IL. Pages 117-121.





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