



Instructions For Use

HCS1002-IFU

205 South 600 West Logan, Utah 84323, U.S.A. – Tel. (800) 729-8350 – Tel. (435) 755-9848 – Fax (435) 755-0015 – www.scytek.com Rev. 1, 10/14/2024

Alcian Blue Control Slides

Description

Alcian Blue Control Slides contain formalin fixed paraffin embedded sections of Human or Animal tissue cut at 4 micron thickness. Slides are known to contain acid mucopolysaccharides and produce a positive staining result with Alcian Blue Solution pH 2.5.

Storage

Store slides at 2-25°C

Suggested Stain Kit (not provided)

AFR-1

See below procedure

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

1. Alcian Blue Solution (pH 2.5)
2. Nuclear Fast Red (Enhanced Stability)
3. Acetic Acid Solution

Storage

- 18-25°C
- 18-25°C
- 18-25°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.

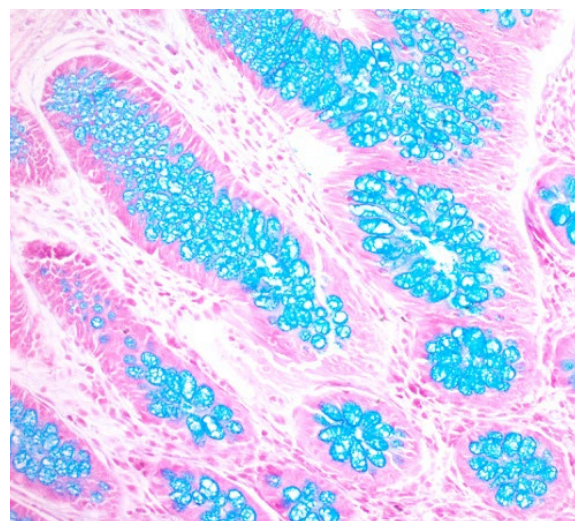
Frozen sections may require protocol modification.

Storage

Store kit and all components at room temperature (18-25°C).

Safety and Precautions

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



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

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.
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. Hoshino-Negishi K, Ohkuro M, Nakatani T, Kuboi Y, Nishimura M, Ida Y, Kakuta J, Hamaguchi A, Kumai M, Kamisako T, Sugiyama F. Role of Anti-Fractalkine Antibody in Suppression of Joint Destruction by Inhibiting Migration of Osteoclast Precursors to the Synovium in Experimental Arthritis. *Arthritis & Rheumatology*. 2019 Feb;71(2):222-31.
2. Li B, Lee C, Martin Z, Li X, Koike Y, Hock A, Zani-Ruttenstock E, Zani A, Pierro A. Intestinal epithelial injury induced by maternal separation is protected by hydrogen sulfide. *Journal of Pediatric Surgery*. 2016 Oct 26.
3. Li B, et al. Endoplasmic reticulum stress is involved in the colonic epithelium damage induced by maternal separation. *J Pediatr Surg* (2016)

4. Kumar G, Hara H, Long C, Shaikh H, Ayares D, Cooper DK, Ezzelarab M. Adipose-derived mesenchymal stromal cells from genetically modified pigs: immunogenicity and immune modulatory properties. *Cytotherapy*. 2012 Apr 1;14(4):494-504.
5. Lillie, R.D. 1977, H.J. Conn's Biological Stains, 9th Edition. Williams & Wilkins, Baltimore. Pages 452-455.
6. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. Battelle Press, Columbus, OH. Pages 172-173.
7. Churukian, C.J., 1989, Manual of Special Stains Laboratory, 4th Edition. University of Rochester, Rochester, New York. Pages 55-56.
8. Carson, F.L., 1996, Histotechnology; A Self-Instructional Text, 2nd Edition. ASCP Press, Chicago, IL. Pages 117-121.
9. Leow, C.C., Romero, M.S., Ross, S., Polakis, P., and Gao, WQ. Hath1, Down-Regulated in Colon Adenocarcinomas, Inhibits Proliferation and Tumorigenesis of Colon Cancer Cells. *Cancer Research* 64, 6050-6057, September 1, 2004.



ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
435-755-9848
U.S.A.