

ALCIAN BLUE pH 2.5 METHOD FOR MUCOSUBSTANCES

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of acid mucopolysaccharides.
PRINCIPLE:	Alcian Blue at pH 2.5 binds to the acidic groups of sulfated and carboxylated glycoproteins and mucin by means of salt bridges. Acetic Acid provides the acidic environment necessary to facilitate these bonds.
CONTROL:	Small intestine, stomach, umbilical cord <i>Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs018.</i>
SPECIMEN PREPARATION:	Formalin fixed, paraffin embedded sections cut at 6 micrometers
SOLUTIONS:	1. Acetic Acid 3% Aqueous Item# s101 2. Alcian Blue 1% in 3% Acetic Acid pH 2.5 Item# s111A 3. Nuclear Fast Red Kernechtrot 0.1% Item# s248 <i>Solutions can be purchased separately from Poly Scientific.</i>
NOTES:	Nuclei stain weakly in formalin-fixed tissue if Kernechtrot is not used as a counterstain.
REFERENCE:	Luna, Lee G. <u>Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology</u> . 3rd Ed. McGraw-Hill Book Co. New York. 1968. pp. 163-167.

STAINING PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Mordant in Acetic Acid 3% Aqueous for 3 minutes.
3. Alcian Blue 1% in 3% Acetic Acid pH 2.5 for 30 minutes.
4. Wash in running water for 10 minutes.
5. Counterstain in Nuclear Fast Red Kernechtrot 0.1% for 3 minutes.
6. Wash in running water for 1 minute.
7. Dehydrate in 95% Alcohol, Absolute Alcohol and clear in Xylene, 2 changes each.
8. Mount with Poly Mount (Item# s2153) or any other acceptable mounting medium.

RESULTS:

Weakly Acidic Sulfated Mucosubstances, Hyaluronic Acid
and SialomucinsDark Blue

Poly Scientific R&D Corp.

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