

PATHOLOGY CORE

Special Stain: Alcian Blue

Purpose:

The purpose is to detect acid mucosubstances and acetic mucins.

Principle:

The alcian blue dye will bind to the mucosubstances

Positive Control Tissue:

Colon tissue

Tissue Fixative:

10% formalin fixed tissue

Reagents Required:

Glacial Acetic Acid

- Vendor- Fisher Chemical
- Lot- 156835

Alcian Blue

- Vendor- Fisher Chemical
- Lot- SLBF8839V

Nuclear Fast Red

- Vendor- Fluka Chemika
- Catalog number- 60700

Solution Preparation:

Alcian Blue Solution- 6ml of glacial acetic acid + 2 grams of alcian blue + 200ml of DI water

Protocol:

1. Deparaffinize slides (xylene→distilled water)
2. Immerse slides in Alcian Blue solution for 30 minutes
3. Wash slides with cold tap water for 2 minutes
4. Rinse slides with DI water
5. Immerse slides in nuclear fast red solution for 5 minutes
6. Wash slides with DI water
7. Dehydrate slides (70% ethanol→xylene)
8. Coverslip

Interpretation:

Acidic mucosubstances=blue

Nuclei=pink/red

Cytoplasm=pale pink



**Children's Hospital
of Philadelphia**

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References:

Theory and Practice of Histotechnology



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