

INTENDED USE

Alcian Blue, pH 2.5 is used to stain acidic mucopolysaccharides. Brazilliant! is used as a red nuclear stain.

PRODUCT SUMMARY

Alcian blue binds specifically to carboxyl and sulfate groups on carbohydrates at pH 2.4 and above. Once bound to tissue, Alcian blue is very difficult to remove and can be followed with any other staining procedure. Neither DNA nor RNA will stain with Alcian blue, presumably because of steric hindrance. The dye molecule is very large and flat, and cannot fit within the coils of nucleoproteins.

Brazilliant! is formulated like Harris Hematoxylin, substituting the natural dye Brazilin for Hematoxylin. Brazilin is oxidized to brazilein with sodium iodate, then complexed with aluminum.

Since Hematoxylin and Brazilin dyes differ only by one hydroxyl group, the mechanism of dye to tissue staining is the same. In all likelihood, the aluminum atom forms coordinate bonds to nucleic acids. Additionally, four hydroxyls on the alum-brazilein complex offer sites for hydrogen bonding. At suitably low pH, staining is limited to DNA and RNA.

INGREDIENTS

3% acetic acid

Alcian Blue, pH 2.5: Alcian blue, acetic acid

Brazilliant!: acetic acid, aluminum ammonium sulfate, reagent alcohol, Brazilin, sodium iodate

WARNING

3% acetic acid: Irritant. Avoid contact with skin and eyes.

Alcian Blue, pH 2.5: Mild irritant. Alcian blue is a dye of untested toxicity.

Brazilliant!: Irritant. Avoid contact with skin and eyes.

For In Vitro Diagnostic Use.

STORAGE

Store kit at room temperature, away from direct sunlight. Keep all containers tightly closed when not in use.

DIRECTIONS FOR USE

1. Filter Alcian Blue, pH 2.5 and Brazilliant! before use.
2. Staining times are dependent upon section thickness and desired color intensity.
3. Alcian Blue, pH 2.5 may deionize nucleic acids causing a decrease in Brazilliant! intensity. Bluing reagent (e.g., Scott's Solution) followed by a tap water rinse prior to Brazilliant! will re-set the charge to increase Brazilliant! intensity.

RECOMMENDED STAINING SCHEDULE

1. Clearant x 33 minutes each
2. 100% alcohol x 21 minute each
3. 95% alcohol1 minute
4. 50% alcohol1 minute
5. Distilled or deionized water x 230 seconds each
6. 3% acetic acidrinse
7. Alcian Blue, pH 2.510 minutes
8. 3% acetic acidrinse
9. Tap water x 230 seconds each
10. Brazilliant!5-10 minutes
11. Distilled or deionized water x 230 seconds each
12. 70% alcohol1 minute
13. 95% alcohol1 minute
14. 100% alcohol x 31 minute each
15. Clearant x 31 minute each

Results: Acidic mucin–blue; Nuclei–red

DISPOSAL

1. Use a licensed waste hauler.
2. Discard into the sanitary sewer system with the approval of local wastewater officials.

MSDS

MSDS are available online at www.anatechltdusa.com.

ORDERING INFORMATION FOR ALCIAN BLUE

<u>Cat#</u>	<u>Packaging</u>
880	Alcian Blue, pH 2.5 Stain Kit
867	Alcian Blue, pH 2.5, 1 quart
862	Alcian Blue, 25 g jar
864	Alcian Blue, bulk, kg