



Artisan™ Alcian Blue/PAS Stain Kit

Code AR169
Order No. AR16992

Intended use

For In Vitro Diagnostic Use.

Alcian Blue/PAS Stain Kit is intended for laboratory use to identify, by light microscopy, acidic and neutral mucins in tissue samples.¹⁻⁴

Routinely processed samples (paraffin-embedded) may be used. The preferred fixative is neutral buffered formalin. The clinical interpretation

of any staining, or its absence, should be complemented by morphological studies and proper controls, and should be evaluated within

the context of the patient's clinical history and other diagnostic tests by a qualified pathologist. All reagents in the Alcian Blue/PAS Stain Kit

have been optimally prepared for use on Dako's Artisan Staining System and require no mixing or diluting.

Summary and explanation

The Alcian Blue/PAS Stain Kit is used to identify acidic and neutral mucins. This procedure clearly separates the acidic and neutral mucins

by color and can be used to distinguish all mucins in tissue sections.

Principle of procedure

Using high-dry light microscopy, acidic and neutral mucins are not visible in Hematoxylin and Eosin preparations. However, greater

sensitivity to the presence of acidic and neutral mucins is achieved with the application of this special stain. The Alcian Blue/PAS Stain Kit is

a modification of the original Mowry procedure.^{1,4}

The Alcian Blue/PAS Stain Kit is optimized for use on the Artisan Staining System. Wash steps follow all of the staining steps. Following

staining, the air dried slides are removed from the instrument cleared with xylene or xylene substitute and mounted with appropriate

mounting media. Results are interpreted using a standard light microscope.

Control Tissue: Neutral Mucin: Stomach, prostate

Acidic Mucin: Skin, umbilical cord

Weakly sulfated epithelial mucin: Large intestine

Reagents provided

The Alcian Blue/PAS Stain Kit is composed of three ready-to-use dispenser packs, except where noted, containing:

Alcian Blue 1% pH 2.5

ALCIAN BLUE pH 2.5

Alcian Blue and 3% Acetic Acid in deionized water

Periodic Acid 0.5%

PERIODIC ACID 0.5%

Periodic Acid in deionized water

Schiff's Reagent Pack

SCHIFF'S REAGENT

Basic Fuchsin, Sodium Sulfite, and <1% Hydrochloric Acid in deionized water

Allow the Schiff's Reagent pack to warm to room temperature prior to use.

Dako provides these reagents at optimal formulation for use according to the instructions provided for staining on prepared tissue sections.

Any deviation from the recommended test procedures may invalidate declared expected results.

Materials required, but not provided

1. Microscope slides
2. Artisan Staining System
3. Wash Solution (code AR102)

Precautions

1. For professional users.

2. Minimize microbial contamination of reagents or increase in nonspecific staining may occur.
3. Reagent packs may contain residual solution after completing the prescribed number of tests.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any changes made to the factory-released procedure.
5. Store reagent packs in an upright position when not in use on the instrument.
6. Keep reagent packs out of direct sunlight and away from heat-generating sources.
7. As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedures, the dangerous properties of the product and the necessary safety instructions. (Per European Union Directive 94/33/EC). Please refer to Material Safety Data Sheet (MSDS) for additional information.

8. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
9. Unused solution should be disposed of according to local, State and Federal regulations.
10. Safety Data Sheet available for professional users on request.

Risk and Safety statements

Schiff's Reagent: 0.1-1% 4,4'-(4-Iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride / Hazard Symbol: Toxic R45 May cause cancer.

S35 This material and its container must be disposed of in a safe way.

S45 In case of accident or if you feel unwell seek medical advice immediately (*show the label where possible*).

S53 Avoid exposure – Obtain special instructions before use.

Restricted to professional users.

Storage

Each component should be stored at the temperature indicated on the label. Do not use after expiration date. If reagents are stored under any conditions other than those specified, the conditions must be verified by the user. There are no obvious signs to indicate instability of this product. Therefore, appropriate tissue must be run as controls for such verification. If unexpected staining is observed which cannot be explained by variations in laboratory procedures or improper storage, contact Dako Technical Support.

Instrument procedure / Staining procedure

Preliminary Comments

Please refer to the *Artisan Operator's Manual* for detailed instructions.

Priming Reagent Packs

Before beginning staining, reagent packs should be primed and checked for leakage. Check the prime of each reagent pack when a new kit is used and before the first staining run of the day.

1. Over a paper towel, if present, remove the red or black shipping cap from the dispense assembly of the reagent pack by gently pulling down on the cap.
2. To prime a reagent pack when it is first received, hold the reagent pack with the dispenser assembly pointed downward and lightly tap on the side of the reagent pack 2–3 times to release any air bubbles that may be trapped in the dispenser assembly.
3. Fully compress and release the plunger 3–4 times in rapid succession, taking care to absorb any expelled fluid into a paper towel, absorbent gauze, or similar material, until a steady stream is obtained.
4. Avoid dispensing excess amounts of reagent during priming. Excessive priming will result in reagent loss, which may cause the reagent pack to run out of fluid before the stated number of tests is performed.
5. Before each use, reagent packs may be primed 1–2 times, checking for a steady stream.
6. Holding the reagent pack in one hand, slide the mounting guide on the back of the reagent pack into the slots on the reagent carousel until the pack is completely seated.

Procedure

Refer to the *Procedure Reports* section in the *Artisan Host Software* for the recommended detailed procedure.

After staining is complete, slides will be dry. Dip slides in xylene or xylene substitute and permanently mount.

Staining interpretation

Neutral mucins:**Magenta**

Acidic mucins:**Blue**

Mixtures of acidic and neutral mucins:.....**Color depends on the dominant entity and will range from blue-purple or purple through violet or mauve**

Performance Characteristics

Reproducibility

Intra-run reproducibility of 100% was determined by staining 12 slides containing the same control tissue on one instrument.

Inter-run reproducibility of 100% was determined by staining 12 slides containing the same control tissue on three different instruments.

Troubleshooting

Refer to the Maintenance and Troubleshooting section of your *Artisan Operator's Manual* or contact our Technical Support Group.