

# Alcian Blue pH 2.5, Kit

Reference: AP0160



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## INTENDED USE AND PRESENTATION:

For *in vitro* diagnostic use.

AP0160. 100 Tests.

## APPLICATIONS:

The Alcian blue pH 2.5 kit was designed to show and differentiate acid mucopolysaccharides in tissue sections.

The interpretation of the stain results is the full responsibility of the user. Any experimental result must be confirmed by a medically established diagnostic product or procedure.

## PRODUCT COMPOSITION:

The Alcian blue pH 2.5 kit is composed by:

Reagent	Name	Volume	Storage
A	Acetic acid solution	30 mL	15-25 °C
B	Alcian blue pH 2.5 solution	30 mL	15-25 °C
C	Nuclear fast red solution	30 mL	15-25 °C

## METHODS AND PROCEDURE:

**Principles of the method:** Alcian dyes belong to the cuprophthalocyanine group; they bind polyanions of acid mucopolysaccharides through saline bounds. In this method, a sodium tetraborate solution transforms the dye into Monastral blue pigment, which is insoluble and can therefore be further manipulated without spreading in the tissue (Alcian blue-PAS).

Alcian blue reacts with polyanions whose components are sulphuric and carboxylic radicals (phosphate radicals of nucleic acid do not react). As a result, acid mucins only are stained.

**Specimen:** Paraffin-embedded tissue samples should be used.

**Procedure time:** 45 minutes.

### Staining procedure:

- 1) Deparaffinize and hydrate for paraffin section.
- 2) Put the slide in distilled water.
- 3) Place in **Reagent A** for 3 minutes.
- 4) Stain in **Reagent B** for 30 minutes.
- 5) Wash in running water for 2-5 minutes.
- 6) Rinse in distilled water.
- 7) Counterstain in filtered **Reagent C** for 5 minutes.
- 8) Wash in running tap water for 1 minute.
- 9) Dehydrate in alcohols of increasing clear in xylene and mount preparation.

See our web site at [www.gennova-europe.com](http://www.gennova-europe.com) for detailed protocols ancillary reagents and support products.

## EXPECTED RESULTS:

During the reaction of the different solutions of the kit with the tissue sections, resulting in the following stains:

Weakly acidic sulphate mucosubstance, hyluronic acid and sialomucins	Dark blue
Nuclei	Red to pink
Cytoplasm	Pale pink

## REQUIRED MATERIALS BUT NOT SUPPLIED:

All reagents, materials, and laboratory equipment for this procedure are not provided with this kit. This includes adhesive slides and cover slips, positive and negative control tissues, xylene or adequate substitute, ethanol, distilled H<sub>2</sub>O, pipettes, Coplin jars, glass jars, moist chamber, histological baths, mounting materials, and microscope.

Buffered solutions for and other auxiliary reagents are available from Genova Scientific.

## STORAGE AND STABILITY:

Store at 15-25 °C until the expiration date printed on product label. Do not use after the expiration date. Keep the containers tightly closed. After the first opening, the product is usable until the expiry date stated on label of intact product. Waste from solutions must be disposed under the procedure of hazardous substance. If the product is stored under different conditions from those stipulated in these technical indications, the new conditions must be verified by the user.

Genova Scientific guarantees that the product will maintain all of the described characteristics from the production date until the expiration date, as long as the product is stored and used as recommended. No other guarantees are provided. Under no



Catalog number



Batch code



In Vitro diagnostic medical device



Temperature limitation



Expiration date



Test number



Manufacturer



See instruction for use



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circumstances is Genova Scientific obliged to cover damages caused by use of this reagent.

## **TROUBLESHOOTING:**

If unusual staining is observed or any other deviations from the expected results, please read these instructions carefully, and if this does not solve the problem, please contact Genova Scientific's technical support department or your local distributor.

## **PRECAUTIONS:**

Use only by qualified personnel. Read with attention the information written on the label (dangerous symbols, risks and safety phrases). Consult always the safety data sheet (MSDS) where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available. Use proper protective equipment in order to avoid contact with reagents and samples in the eyes, skin, and mucosal tissues. MSDS is available upon request.

## **PERFORMANCE CHARACTERISTICS:**

Genova Scientific has performed studies to evaluate the functioning of this product, concluding that the product is both specific and sensitive for recommended use.

## **BIBLIOGRAPHY:**

Mowry RW. Alcian bleu technics for the histochemical properties of rodent acid mucopolysaccharides J Hist Cytochem 1956; 4: 407.  
Spicer SS. A correlative study of the histochemical properties of rodent acid mucopolysaccharides J Hist Cytochem 1958; 6: 399.  
Vialli M. Osservazioni all'uso dell'Alcian Blue 8GS nello studio dei mucopolisaccaridi, Boll Soc Ital Biol Sperim 1951; 27: 597-599

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