



# ALCIAN BLUE PAS STAIN KIT (SS002-25)

## **INTENDED USE**

BioMarq Alcian Blue PAS *in vitro* diagnostic stain kit utilizes the principle of both PAS & Alcian blue to demonstrate varied types of tissue proteoglycans in formalin-fixed paraffin-embedded tissue sections. The results using this product should be interpreted by a qualified pathologist in conjunction with the patient's relevant clinical history, other diagnostic tests and proper controls.

## **PRODUCT DESCRIPTION**

Initially acidified mucins are stained with Alcian blue then neutral mucins with PAS reagents and finally the remaining mucins stain depending on the availability of dominant moiety.

### **KIT CONTENTS**

| 1X8ml |
|-------|
| 1X8ml |
|       |

## **MATERIALS REQUIRED BUT NOT PROVIDED**

Microscope slides Xylene/ Xylene substitute Reagent alcohol/Ethanol Deionized or distilled water SS Wash Solution (Catalog No WB005-DC) Positive Control Slides Mounting Solutions

## STORAGE AND STABILITY

Store at 2-8°C. Do not freeze. Not to be used beyond the expiration date prescribed on label.

#### SPECIMEN PREPARATION

**Fixation:** 10% NBF or Carnoy's fixative. **Paraffin Sections:** Cut sections at 4 microns.

#### RECOMMENDED PROTOCOL

Deparaffinize with xylene/ xylene substitute and rehydrate through graded alcohols to deionized water. Wash the slide with SS Wash Solution for 3 times.

Stain the slides with 300ul of Alcian Blue pH2.5 for 15 min. Wash the slide with SS Wash Solution for 4 times.

Treat the slides with 300ul of Periodic acid for 5 min. Wash the slide with SS Wash Solution for 3 times.

Stain the slides with 300ul of Schiff's reagent for 10min. Wash the slide with SS Wash Solution for 3 times.

Stain the nuclei with 300ul of Mayer's Hematoxylin solution for 1 min. Wash the slide with SS Wash Solution for 3 times

Differentiate the slides with 300ul of Acid alcohol for 30Sec. Wash the slide with SS Wash Solution for 3 times.

Add bluing Reagent 300ul till the sections appear blue.

Blot dry and Mount the slides with BioMarq XY-Mount (Catalog No MS002) or using BioMarq T-Mount (Catalog No MS003).

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#### **TECHNICAL NOTE**

Bring all reagents to RT before use

Gently invert all reagents prior to use

Thickness of section may affect the intensity of staining

Users can also procure the Positive Control Slides available from BioMarg for their Quality Control purpose.

Follow the protocol recommendations provided in the data sheet. If atypical results occur, contact BioMarq Technical Support at 040-29702960.

#### **REFERENCES**

- 1. Usman Ali et al, Mucin Histochemistry in Tumours of Colon, Ovaries and Lung, J Cytol Histol 2012.
- 2. Mowry R.W. (1956) Alcian blue techniques for the histochemical study of acidic carbohydrates. J Histochem and Cytochem 4:403-407
- 3. Scott J.E., Quintarelli G. and Dellovo M.C. (1964) The chemical and histochemical properties of alcian blue. I. The mechanisms of alcian blue staining. Histochemie 4:73-85

#### RECOMMENDED CONTROL

**SMALL INTESTINE OR COLON** 

### STAINING INTERPRETATION

Acidic mucins (sulfated and carboxylated), proteoglycans, hyaluronic acid — Blue;

Glycogen, neutral mucins & glycoproteins — Magenta/Red

Mixed mucins (neutral and acidic) — Purple to Blue

For image please visit our web site www.biomarq.net

## **PRECAUTIONS**

Specimens should be handled carefully before and after the assay to avoid transmission of infection and disposed of with proper precautions

When working with Special Stain chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles

For detailed safety information related to BioMarq Products, please refer to appropriate safety data sheets (SDS) available online at www.biomarq.net