



# ELASTIC STAIN KIT (SS005-25)

## **INTENDED USE**

BioMarq Elastic Stain Kit is used for *in vitro* diagnostic use. The elastic stain kit is useful in demonstrating atrophy of elastic tissue in cases of emphysema, thinning and loss of elastic fibers in arteriosclerosis and other vascular diseases. 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

Verhoeff's stain forms a variety of cationic, anionic and non-ionic bonds with elastin, the main constituent of elastic fiber tissue. The iron Hematoxylin component of dye has high affinity towards elastin fibers, thus retain the stain color whereas the other tissue components get decolorized. The elastic fibers will be stained blue-black and background will be stained yellow.

# **KIT CONTENTS**

Van Gieson's Solution (SS014-8D)	1X8ml
Ferric Chloride 2% (SS015-8D)	1X8ml
Alcoholic Hematoxylin (SS016-8D)	1X8ml
Ferric Chloride 10% (SS017-4D)	1X5ml
Lugol's Iodine (SS018-4D)	1X4ml
Hypo 5% (SS019-8D)	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 4-5 microns.

## PREPARATION OF WORKING SOLUTION

**Verhoeffs Hematoxylin:** Mix Alcoholic Hematoxylin (SSR16-25D), Fe. Chloride 10% (SSR17-10D) & Weigert's Iodine Solution (SSR17-10D) in 5:2:2 ratio.

#### 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 Verhoeffs Solution for 60 min. Wash the slides thoroughly with SS wash solution till the black color is removed.

Differentiate the slides with 300ul Ferric chloride for 1-2 min. Wash the slides with SS Wash Solution for 3 times.

Stain the slides with 300ul of Sodium Thiosulfate for 1 min. Wash the slides with SS Wash Solution for 3 times.

Counter stain the slides with 300ul of Van Gieson solution. Wash the slides with SS Wash Solution for 2 times.

Dehydrate quickly, clear in xylene or its substitute & 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 BioMarq 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.

## RECOMMENDED CONTROL

**ARTERY OR SKIN** 

## **STAINING INTERPRETATION**

Elastic fibers - Blue-Black to Black Nuclei - Blue Collagen- Red Other tissue elements - Yellow.

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

#### **REFERENCES**

1. Ayen, E et al, Histological and histomorphological changes of different regions of oviduct during follicular and luteal phase of estrus cycle in adult, Iranian J. Vet. Res, 2012.

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