

## ACID FAST BLUE STAIN KIT (SS001-25)

### INTENDED USE

BioMarq Acid Fast Blue Stain Kit is used for *in vitro* diagnostic identification of Mycobacterium 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

Carbol-fuchsin acid fast stain is used to demonstrate acid fast bacteria in tissue sections and on smears, because of the difficulty in staining these organisms with ordinary dyes or through Gram staining. Acid fast bacteria stain with red dye Carbol fuchsin and retain the dye when treated with acid, which is because of the presence of mycolic acid in their cell wall whereas the non-acid fast bacteria lose the stain and are further stained by Methylene Blue counter stain.

### KIT CONTENTS

Carbol Fuchsin Solution (SS001-8D)	1X8mL
Acid Fast Decolorizer (SS002-8D)	1X8mL
Methylene Blue Counterstain (SS003-8D)	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.

### 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 Carbol Fuchsin Solution for 15 min at 60 °C. Wash the slide with SS Wash Solution for 4 times.

Decolorize with 300ul of Acid Fast Decolorizer for 2 min. Wash the slide with SS Wash Solution for 3 times.

Stain the slides with 300ul of Methylene Blue Counterstain for 30sec- 1min. Wash the slide with SS Wash Solution for 3 times.

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

### 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

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All bacteria that contain mycolic acid may stain positive, hence it is not specific for *Mycobacterium*, although

2. Putt F.A. (1951) A modified Ziehl-Neelsen method. Am J Clin Pathol 21:92-95.

indicative.

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

**LUNG INFECTED WITH *MYCOBACTERIUM*.**

### STAINING INTERPRETATION

Acid Fast bacilli: Red

Non Acid Fast bacteria & Background: Blue

For image please visit our web site [www.biomarq.net](http://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](http://www.biomarq.net)

### REFERENCES

1. Pottz G., Rampey J.H and Furmandean B. (1964) A method for rapid staining of acid-fast bacteria in smears and sections of tissue. Am J Clin Pathol 42: 552-554.