

AG - INDIA INK STAIN

PRINCIPLE

AstraGene's India Ink Stain is an acid dye which is used for negative staining. This means that the dye easily gives up a hydrogen ion (proton) and the chromophore of the dye becomes negatively charged. Since the surface of most bacterial cells is negatively charged, the cell surface repels the dye. The bacteria will appear as bright dots on a dark background.

APPLICATION

AstraGene's India Ink Stain is recommended for use of negative staining techniques used to determine an organism's cellular morphology. The main use of this stain is to study the morphological shape, size and arrangement of bacterial cells that are difficult to stain or too delicate to heat. This is the only staining technique in which bacterial cells are not stained but are made visible against a dark background as colourless bodies.

PACKAGE CONTENTS

| Description | Quantity |
|-------------|----------|
| Reagent | 1*250ML |

| Catalogue Number | Description |
|-------------------|--|
| AG/Stain/II/22/01 | Used for morphological study of bacteria |

STORAGE & STABILITY

Prepacked reagents are stored at room temperature & expiry date is 12 months

MATERIAL REQUIRED

- India Ink stain
- Inoculating loop or needle, swabs, droppers, collection containers.
- Glass slides, coverslips, Staining rack
- Test specimen
- Compound microscope

STAINING PROCEDURE

1. Place a drop (25µl) of a 7% Nigrosine solution or India ink near one end of a well cleaned slide (depending on the specimen, sometimes India ink needs to be diluted with distilled water)
2. Remove a small amount of culture using an inoculation loop and disperse it into the drop of dye without spreading the drop.
3. Take another microscopic glass slide, place it near the sample-dye mixture at an angle of about 45 °
4. Move the slide towards the drop of the sample-dye mixture until contact is made with the drop at the specific angle. Then move the slide gently and quickly forward on the sample slide, drawing the dye mixture behind it in a thin film.
5. Allow the smear to air dry, then observe microscopically on high power (45X) and oil immersion (100X) objectives.

RESULT INTERPRETATION:

Positive result: Organisms possessing a capsule appear highly refractile, surrounded by a clear zone or halo against a dark background.

Negative result: No clear zone around the organism is observed.

SPECIMEN COLLECTION AND HANDLING:

- For clinical samples, follow appropriate techniques for handling specimens as per established guidelines.
- After use, contaminated materials must be sterilized by autoclaving before discarding.

PRECAUTIONS:

1. The kit should only be used for in vitro detection.
2. All operations must be carried out in strict accordance with the instructions.
3. All the samples need to be considered as biologically hazardous and handled accordingly.

SYMBOLS:



Date of manufacture



Use-by-date



Do not use if package is damaged



Manufacturer



Batch Code



CE mark of Conformity



Refer to the instructions



13485:2016

ISO



GMP



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