

**USE**

This kit is utilized as a quality control procedure for India Ink wet mounts. The kit provides both positive and negative controls for monitoring India Ink and India Ink wet mount procedures.

**SUMMARY AND PRINCIPLES**

India Ink wet mounts are used for the visualization of encapsulated microorganisms, especially *Cryptococcus neoformans*. India Ink is added to each positive and negative suspension on a glass slide and observed under a microscope. The positive control provides an encapsulated suspension of *Cryptococcus neoformans* to be utilized when performing India Ink procedures. The negative control provides a non-encapsulated suspension of *Candida sp.* to be utilized when performing India Ink procedures.

**CONTENTS**

*Positive Control (Cryptococcus neoformans) (Catalog 100111)*

*Negative Control (Candida sp.) (Catalog 100112)*

*India Ink (Catalog 100114)*

**PRECAUTIONS**

This kit is for IN VITRO DIAGNOSTIC USE only. Precautions should be taken against the dangers of microbiological hazards. Specimens, containers, and controls should be sterilized after use. Wear suitable protective clothing, gloves, and eye/face protection.

**STORAGE INSTRUCTIONS**

This product should be stored at room temperature 15 - 30°C and remain in the original packaging until needed.

**EVIDENCE OF DETERIORATION**

This product should not be used if the expiration date has passed. If any deficiencies are observed, notify the manufacturer.

**OTHER MATERIAL REQUIRED BUT NOT SUPPLIED**

The usual microbiological equipment such as slides, coverslips, microscope, biohazard bags, etc. are needed for procedures involving the use of this product.

**PROCEDURE**

CONTROLS (Mix vials before dispensing)

1. Place one drop of each control (positive and negative) onto a glass slide.
2. Place one drop of India Ink onto each control drop and mix well.
3. Place a cover slip over each control.
4. Examine at X100 to X1000 with microscope.

SPECIMENS

1. Place one drop of each specimen onto a glass slide.
2. Add one drop of India Ink to specimen, mix well.
3. Place a cover slip over specimen.
4. Examine at X100 to X1000 with microscope.

**EXPECTED RESULTS**

Positive: The polysaccharide capsules will exclude the particles of ink, and the capsules will appear as clear halos around the organisms on semiopaque backgrounds.

Negative: No capsules present, no clear halos observed.

#### **LIMITATION OF THE PROCEDURES**

Specimen samples may contain multiple artifacts, such as erythrocytes, leukocytes, talc particles from gloves, and bubbles may displace the ink, mimicking yeast cells. These artifacts make it necessary to examine the wet mount carefully to distinguish properties consistent with the organisms: rounded shapes with buds of various sizes and double-contoured cell walls. Interpretation can also be hindered if the suspension is too thick, blocking the transmission of light completely.

#### **REFERENCES**

1. Murray, P.R. et al. 1995. Manual of Clinical Microbiology, 6th ed. ASM. Washington, DC.