

AG- LACTOPHENOL COTTON BLUE STAIN (IFU)

PRINCIPLE:

Fungi are eukaryotic organisms and they are classified into two main groups, yeast and molds. Its cell wall is made up of chitin. Fungal cells have both macroscopic as well as microscopic structures. Lactophenol Cotton Blue reagent is used for staining as well as for wet mounting of fungi.

Astragene's lactophenol cotton blue (LPCB) wet mount preparation is the most widely used method of staining and observing fungi and is simple to prepare. The preparation has three components: Lactic acid preserves the fungal structure and clears the tissue while phenol acts as a disinfectant and Cotton blue is an aniline dye that stains the chitin in the fungal cell walls imparting blue coloration to the fungal spores and hyphae. Glycerol is a viscous substance that prevents drying of the prepared slide specimen.

PACKAGE CONTENTS:

Description	Catalogue Number	Quantity
Lactophenol Cotton Blue Stain	AG/Stain/LCB/22/01	200 mL

STORAGE & STABILITY:

- Store between 10- 30°C in tightly closed bottle and away from bright light.
- Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition.
- Seal the container tightly after use.

TYPES OF SPECIMENS:

- Primarily with pure cultures, clinical samples - skin, hair and nail tissue (certain specimens may be examined directly using this stain, others may require processing).

DIRECTIONS/PROCEDURE:

- On a clean microscopic glass slide, take a small drop of Astragene's Lactophenol cotton blue stain.
- Add the fungal specimen to this drop of stain using an inoculation loop (from solid medium), depending on the sample of use.
- Tease the fungal sample using a needle to ensure that the sample mixes well.
- Now, using a dropper or pipette, add another drop of the stain.
- Carefully cover the stained specimen with a clean sterile coverslip without creating any air bubbles. Wait for 15-20mins.
- Examine the stained fungal specimen microscopically at 40X and 100X, to observe for fungal spores and other fungal structures.

INTERPRETATION OF THE RESULTS:

Microscopic observation of the slide reveals blue-color-stained fungal spores, hyphae, and fruiting structures against a pale blue background

LIMITATION:

1. Wet mount or Lactophenol cotton blue staining slide cannot be stored over a longer period of time.
2. Lactophenol cotton blue staining does not allow us to observe the early-stage differentiation of the fungal cell.
3. It may cause disruption of the fungal morphology.
4. Check expiry date before, use the solution sample.
5. Lactophenol Cotton Blue is useful in the recognition and presumptive identification of fungi.
6. In tease mount, conidia or spores may be dislodged from the conidiogenous or sporogenous cells.
7. Once the specimen immersed in Lactophenol Blue Solutions it will be rendered safe for handling outside of the biological safety hood

WARNING & PRECAUTIONS:

- For In Vitro Diagnostic Use only.
- For professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Microbial contamination may decrease the accuracy of the staining
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Samples should be processed in the correct containment level conditions.
- Dispose of all material in accordance with local regulations.

SYMBOLS:



Do not use if package is damaged



Manufacturer



Batch Code



CE mark of Conformity



Refer to the instructions



ISO



GMP



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