

INTENDED USE

For the identification of fungi and moulds in prepared slides from clinical specimens.

SUMMARY AND EXPLANATION

Lactophenol Cotton Blue is formulated with Lactophenol, which serves as a mounting fluid, and Aniline Blue, an acid dye that stains components of the cell wall.

PRINCIPLE OF THE TEST

Organisms suspended in Lactophenol Cotton Blue are killed due to the presence of phenol. Aniline Blue stains the chitin and cellulose present in fungal cell walls.

MATERIALS PROVIDED

-	PL.7054	Lactophenol Cotton Blue	500 ml
-	PL.7055	Lactophenol Cotton Blue	1000 ml

Per 100ml solution:

- Lactophenol Cotton Blue contains 0.05g of Aniline Blue powder.

MATERIALS REQUIRED BUT NOT PROVIDED

- Glass slides
- Coverslip
- Inoculating loop
- Microscope
- Immersion Oil PL.396

STABILITY AND STORAGE

Lactophenol Cotton Blue should be stored at 15-25°C in its original container. Product stored under these conditions will be stable until the expiry date shown on the product label.

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.
- Specimens should be processed in the correct containment level conditions.
- Dispose of all materials in accordance with local regulations.

TEST PROCEDURE

Cover slip method:

- Place a drop of Lactophenol Cotton Blue in the centre of a clean glass slide.
- Remove a fragment of the fungus colony 2-3mm from the colony edge using an inoculating needle.
- Place the fragment in the drop of stain and tease gently.
- Apply a coverslip. Press gently to remove air bubbles.
- Examine using a microscope.

Tape method:

- Place a drop of Lactophenol Cotton Blue onto a clean glass slide.
- Take a small piece of tape (2-3cm long) and place, sticky side down, onto a fungal colony.
- Use an inoculating loop to gently press on the tape, to ensure contact between the tape and the fungus.
- Place the tape, sticky side up, on to the drop of stain on the slide.
- Apply a second drop of Lactophenol Cotton Blue onto the exposed fungal elements and place a cover slip on top. Press gently to remove air bubbles.
- Examine using a microscope.

QUALITY CONTROL PROCEDURE

Internal quality control of the Lactophenol Cotton Blue stain must be performed regularly on known reference material.

Recommended Quality Control:

Positive control – a proven positive

Negative control – a proven negative

INTERPRETATION OF RESULTS

When observed microscopically, mycelial and fruiting structures stain blue. A positive result will show stained hyphal structures; no hyphal structures indicates a negative result. Refer to an appropriate textbook for further differentiating features of diagnostic fungal specimens.










LIMITATIONS OF THE PROCEDURE

- Only experienced personnel should carry out the interpretation of stained slides.
- Read prepared slides as soon as possible after staining. Failure to do so may affect the results.
- Lactophenol Cotton Blue is useful in the recognition and presumptive identification of fungi. Additional characteristics including colony morphology and biochemical tests should be used where appropriate for final identification. For further information, consult the appropriate references.

REFERENCES

- Anderson, N.L. et al. Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory. Coordinating ed., A.S. Weissfeld. *American Society for Microbiology*, Washington, D.C.
- Crookham, J. and Dapson, R. Hazardous Chemicals in the Histopathology Laboratory, 2nd ED, 199, *Anatech*.
- Gurr, E. A. Practical Manual of Medical and Biological Staining Technique. 1953
- Harris, J.L. (2000) Safe, Low-Distortion Tape Touch Method for Fungal Slide Mounts. *Journal of Clinical Microbiology*. 38(12): 4683-4684.
- Isenberg HD, Ed. Clinical microbiology procedures handbook, Vol I Washington, DC: *ASM Press*, 1992.
- Larone, D. H. Medically important fungi: a guide to identification. Washington DC: *ASM Press*, 1995.
- Monheit, J.E., Cowan, D.F. and Moore, D.G. Rapid detection of fungi in tissues using calcofluor white and fluorescence microscopy. *The Archives of Pathology and Laboratory Medicine*. 108, 616-618 (1984).


- Public Health England. May 2019. UK Standards for Microbiology Investigations: Staining Procedures. *Bacteriology – Test Procedures*. TP 39, Issue no.3.
- Tille, P. et al. Bailey and Scott's Diagnostic Microbiology, C.V. *Mosby Company*, St Louis, MO.
- Wacko, R. and Sherris, J.C. (1963). *American Journal of Clinical Pathology*. 39:429-432.

	= Use by
	= Lot number
	= Catalogue number
	= Manufacturer
	= Authorized Representative in the European Community
	= Contains sufficient for <n> tests
	= In vitro diagnostic medical device
	= Temperature limitation
	= Consult instructions for use

EC REP	Advena Ltd. Tower Business Centre, 2 nd Floor, Tower Street, Swatar, BKR 4013, Malta.
---------------	---

HAZARDS IDENTIFICATION

Please refer to Safety Data sheets for full text for all hazard and precautionary statements.

	PL.7054 PL.7055	H302+H332, H314, H341, H373, H412 P270, P273, P280, P301+P330+P331, P304+P340, P303+P361+P353, P310, P305+P351+P338, P501
	DANGER	

