

LACTOPHENOL BLUE SOLUTION

CE IVD *In vitro* diagnostic medical device

Classified acc. to Regulation (EU) 2017/746 - Class A device

Blue solution for use in microbiology for staining and analysis of fungi

INSTRUCTIONS FOR USE

BASIC UDI number	385889212HPC4030405FGEB		
EMDN code	W0104030405		
REF Catalog number	Volume	UDI-DI number	
LPB-OT-100	100 mL	03858888829063	
LPB-OT-250	250 mL	03858888829087	
LPB-OT-500	500 mL	03858890009842	



Intended use and test principle

Lactophenol Blue is one of the reagents most commonly used as a part of standard methods of microscopic fungi analysis. It is used for preparing semipermanent and permanent microscopic sections that have the fungus cytoplasm stained, creating a bright blue background. That enables detecting hyphal cell wall and other fungal structures that are stained dark blue. The solution consists of four components: phenol (fungicide that causes cellular protein precipitation and inactivation of enzyme systems), lactic acid (acts as a clearing medium), Aniline Blue dye (stains hyalins of fungal structures and in turn making them visible) and glycerol (enables semipermanent state of the section and its analysis 18-24 hours after preparation). Because of the components' properties, BioGnost's Lactophenol Blue solution is at the same time a mounting medium and a staining reagent, enabling practical, fast and efficient sample analysis.

Product description

- **LACTOPHENOL BLUE SOLUTION** – Blue solution for use in microbiology for visualisation and analysis of samples of fungi

Additional materials that can be used in this method

- VitroGnost slides and coverslips for use in histopathology and cytology

Sample staining procedure

1.	Add 1-2 drops of Lactophenol Blue solution on a clean glass slide	
2.	Add a fungus sample (preferably containing spores or structures that contain spores) to the drop of the solution using a sterilized, cold microbiological loop	
3.	Spread the sample using the loop in order to equally mix it with the dye in a thin layer	
4.	Slowly put the cover glass on the sample. Avoid formation of air bubbles under the cover glass	
5.	Let it react.	5 min
6.	Examine the sample under a microscope at low magnification	
Note: Using a colorless varnish enables isolation of the cover glass and turning the sample into a permanent (control) preparation.		

Result

Yeast cells, mycelium, hyphae, budding structures (cell reproduction elements) – blue
Background (cytoplasm) – light blue

Limitations

This product is intended for professional laboratory use for diagnostic purposes only. Deviations from the staining procedure described in this Instruction for use may cause differences in staining results.

Sample preparation and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples using modern technology and mark them clearly. Be sure to follow the manufacturer's handling instructions. To avoid errors, staining, mounting of the slides, and diagnosis can only be carried out by qualified personnel. Use a microscope equipped according to medical diagnostic laboratory standards. To avoid an incorrect staining result, it is advised to use a positive and negative control.

If a serious incident occurs during use of this product or as a result of its use, please report it to the manufacturer or authorized representative and competent authority.

Safety at work and environmental protection

Handle the product in accordance with occupational health and environmental protection guidelines. Used and expired solutions must be disposed of as special waste following national guidelines. Reagents used in this procedure can pose a danger to human health. The examined tissue samples are potentially infectious, and it is necessary to take the measures needed to protect human health in accordance with the guidelines of good laboratory practice. It is mandatory to read and act according to the information and warning signs printed on the product label and in the Safety Data Sheet, which is available on request.

Storage, stability, and shelf life

Upon receipt, store the product in a dry place and well-closed original packaging at a temperature of +15 °C to +25 °C. Do not freeze or expose to direct sunlight. After first opening, the product can be used until the specified expiry date, if stored properly. The expiration date is printed on the product label.

References

1. Aneja, K. R. (2003): Experiments in Microbiology, Plant Pathology and Biotechnology, 4th ed., New Age International Publishers.
2. Heritage, J., Evans, E.G.V., Kilington, R. A. (1996): Introductory Microbiology, 1st ed., Cambridge University Press.

Warnings and precautions regarding the materials contained in the product:

	H314 H318 H341 H373 H301+H311+H331	Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. Toxic if swallowed, if on skin, or if inhaled.
	P280 P302+P352 P305+P351+P338 P308+P311	Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: rinse with plenty of water. IF IN EYES: rinse carefully with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF exposed or concerned: get medical advice/attention.

LPB-IFU_ENV4, 25.02.2026., IŠP

 Manufacturer	 Batch code	 Consult Instructions for use	 <i>In vitro</i> diagnostic medical device
 Date of manufacture	 Catalogue number	 Caution	 European conformity
 Use-by date	 Temperature limit	 Contains hazardous substances	 Unique device Identifier

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Version	Description / reason for change	Date
4	Revised acc. to Regulation (EU) 2017/746 - IVDR	25.02.2026.