BIOGNOST®

# LACTOPHENOL SOLUTION

IVD *In vitro* diagnostic medical device CE

## Transparent solution for fungi analysis used in microbiology
## INSTRUCTIONS FOR USE

REF Catalogue number: LP-OT-100 (100 mL) LP-OT-250 (250 mL)

### Introduction

Lactophenol solution is one of the reagents most commonly used as a part of standard methods of microscopic fungi analysis. It is used for making sempermanent and permanent microscopic sections used for distinguishing between hyphae walls and other fungal structures. The solution consists of three components: phenol (fungicide that causes cellular protein precipitation and inactivation of enzyme systems), lactic acid (acts as a clearing medium), and glycerol (enables semi permanent state of the section and its analysis 18-24 hours after preparation). Because of the components' properties, BioGnost's Lactophenol solution is at the same time a mounting medium and a visualization reagent, enabling practical, fast and efficient sample analysis. Without added blue color.

### Product description

- **LACTOPHENOL SOLUTION** - Solution for use in microbiology for visualisation and analysis of samples of fungi.

### Other products that may be used:

- Glass slides for use in microbiology, such as VitroGnost ECONOMY GRADE or one of more than 30 models of BioGnost's glass slides

### Sample processing procedure

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| **1.** | Add 1-2 drops of Lactophenol 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.** | View the sample under microscope using low magnification. | |
| | Note:<br>Using a colorless varnish enables isolation of the cover glass and turning the sample into a permanent (control) preparation. | |

### Results

Microscopic analysis differentiates between the background (cytoplasm) and cells of yeast, mycelia, hyphae, and budding structures (parts of reproductive cells).

### Note

Microbiology staining procedures are not standardized and they depend on standard operating procedures of individual laboratories and the experience of the personnel conducting the staining procedure. Intensity of staining depends on the period of immersion in the dye. Depending on personal requests and standard laboratory operating procedures, sample processing and staining can be carried out according to other protocols.

### Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for use. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory. In order to avoid an erroneous result, a positive and negative check is advised before application.

### Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet which is available on demand.

### Storing, stability and expiry date

Keep Lactophenol solution in a tightly sealed original packaging at temperature between 15°C and 25°C. Keep in dry places, do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's 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.



LP-OT-X, V4-EN3, 24 February 2017, AK/VR


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| | Refer to the supplied documentation | °C | Storage temperature range | | Number of tests in package | REF | Product code | CE | European Conformity | | BIOGNOST Ltd.<br>Medjugorska 59<br>10040 Zagreb<br>CROATIA<br>www.biognost.com |
| | Refer to supplied instructions | | Keep away from heat and sunlight | | Valid until | LOT | Lot number | | Manufacturer | | |
| IVD | For *in vitro* diagnostic use only | | Keep in dry place | | Caution - fragile | | | | | | |

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