



## Pagano Levin Base

M1390

### Intended Use:

Recommended for isolating and differentiating *Candida* species.

### Composition\*\*

Ingredients	g/ L
Peptone	10.000
Yeast extract	1.000
Dextrose (Glucose)	40.000
Agar	15.000
Final pH ( at 25°C)	6.0±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 33.0 grams in 490 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add 5 ml of TTC solution 1% (FD057). Mix well. Then add 5 ml of rehydrated contents of one vial of Neo Selective Supplement (FD174). Mix well and pour into sterile Petri plates.

### Principle And Interpretation

Pagano Levin Base prepared as per the formulation of Pagano, Levin and Trejo (1) is used for the isolation and differentiation of *Candida* species. Differentiation is based on the ability of *Candida* species to reduce TTC (2,3,5-Triphenyl Tetrazolium Chloride). TTC is a redox indicator which is colourless in the oxidized form and when reduced forms an insoluble red triphenyl formazan compound which appears as red coloured colonies (2). Pagano Levin Base is superior to Sabouraud Dextrose Agar in detecting yeast species (3).

Peptone provides carbon and nitrogen source required for good growth of *Candida* species. Yeast extract provides vitamins and cofactors. Dextrose is an energy source. TTC Solution 1%, added to the basal medium, facilitates the differentiation of yeast colonies based on the color change that occurs when *Candida* reduces TTC. Neomycin helps to inhibit growth of most of the accompanying bacteria.

### Type of specimen

Clinical samples

### Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations :

1. Further wet mount examination of infected material should be done.

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder

**Gelling**

Firm, comparable with 1.5% Agar gel

**Colour and Clarity of prepared medium**

Light amber coloured slightly opalescent gel forms in Petri plates

**Reaction**

Reaction of 6.6% w/v aqueous solution at 25°C. pH : 6.0±0.2

**pH**

5.80-6.20

**Cultural Response**

Cultural characteristics observed with added TTC solution 1% (FD057) and Neo Supplement (FD174), after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	good	40-50%	cream to light pink
<i>Candida parapsilosis</i>	50-100	good	40-50%	red to maroon
<i>#Teunomyces krusei</i> ATCC 24408	50-100	good	40-50%	white to cream spreading
<i>Candida tropicalis</i> ATCC 750	50-100	good	40-50%	red to maroon
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 <sup>4</sup>	inhibited	0%	

Key : \*Corresponding WDCM numbers.

# - Formerly known as *Candida krusei*

**Storage and Shelf Life**

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

**Disposal**

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

**Reference**

- Pagano J., Levin J. V. and Trejo W., 1958, Antibiot. Annu. 1957-1958:137.
- MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore
- Samaranayake L.P., MacFarlane T.W. and Williamson M.I., 1987, J. Clin. Microbiol. 25:162.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

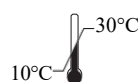
Revision : 03/2024



HiMedia Laboratories Pvt. Limited,  
Plot No.C-40, Road No.21Y,  
MIDC, Wagle Industrial Area,  
Thane (W) -400604, MS, India



In vitro diagnostic  
medical device



Storage temperature



CEpartner4U, Esdoornlaan 13,  
3951DB Maarn, NL  
www.cepartner4u.eu



CE Marking



Do not use if  
package is damaged

**Disclaimer :**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.