

Peptone Yeast Extract (PYE) Agar - Instructions for Use

Intended Use

BACGro™ Peptone Yeast Extract (PYE) Agar, when prepared as directed, is intended for the selective isolation of yeasts and molds, including pathogenic fungi such as dermatophytes. PYE Agar is not intended for use in diagnosis, treatment, or prevention of disease in humans.

Product Summary

PYE Agar is a modified version of Sabouraud Dextrose Agar (SDA) by Carmichael and Kraus¹ to detect the presence of dermatophytes, including the causative agents for ringworm, athlete's foot, and jock itch.

The addition of streptomycin and chloramphenicol inhibit bacterial growth, promoting the detection of pathogenic fungi. Soy peptone and yeast extract provide the nitrogenous sources and vitamins needed for fungal growth, while glucose serves as the energy source. Agar is included as a solidifying agent.

Formulation (per Liter)*

Soy Peptone	10.0 g
Yeast Extract	5.0 g
Dextrose	40.0 g
Streptomycin Sulfate	0.03 g
Chloramphenicol	0.05 g
<u>Agar</u>	<u>17.0 g</u>
Total	72 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

1. Add 72 g of Peptone Yeast Extract (PYE) Agar powder into 1L purified water.
2. Stir while heating. Bring to a soft boil to completely dissolve.
3. Autoclave at 121 degrees Celsius for 15 minutes.
4. Cool prior to use.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Homogenous, free flowing powder, free of debris

Appearance (prepared): Light to tan, clear or moderate haze, with no precipitate or debris

pH (prepared): 6.4 – 6.8 at 25°C

Organism Performance:

Strain ID			
	Time	Temp.	Result
<i>A. niger</i> (ATCC® 16404)	3 – 5 days	25° C	Growth
<i>C. albicans</i> (ATCC® 10231)	3 – 5 days	25° C	Growth
<i>S. cerevisiae</i> (ATCC® 9763)	3 – 5 days	25° C	Growth
<i>T. mentagrophytes</i> (ATCC® 9533)	≤7 days	25°C	Growth
<i>S. aureus</i> (ATCC® 25923)	3 – 5 days	25° C	Inhibited
<i>E. coli</i> (ATCC® 25922)	3 – 5 days	25° C	Inhibited

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium.

Storage and Expiration

BACGro™ Peptone Yeast Extract Agar should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

DCM3905 – Peptone Yeast Extract (PYE), 5kg

¹CARMICHAEL, J. W. &H. J. KRAUS, 1959. The cattle ringworm fungus, *Trichophyton verrucosum*, in Alberta. Alberta med. Bull. **24**, 201–203.

Revision History:

Revision	Description	Effective Date
03	Updated incubation time from "3 – 7 days" to "3 – 5 days" to match industry standard. Updated incubation time of 9533 to ≤7 days to match industry standard.	13-MAR-2024
02	Periodic Review. No changes required.	14-JUL-2022
01	Document creation	20-NOV-2019