

SABOURAUD DEXTROSE BROTH

Culture of yeasts and molds.

Sabouraud Dextrose Broth is used for the culture or subculture of yeasts and molds (1).

It is recommended by the USP for testing the antimicrobial (and more specifically the antifungal) activity of pharmaceutical products (2).

Formula in g/L

Peptone mixture 10,00 Glucose 20,00

Final pH at 25°C: 5,6 ± 0,2

Principle:

Sabouraud Dextrose Broth is used for culturing yeasts, molds and aciduric microorganisms. The high glucose concentration and acid pH make this medium selective for fungi.

It is used for cultivating molds, yeasts and pathogenic fungi, particularly those associated with skin infections. It is also used in tests for sterility.

Glucose is the carbohydrate energy source. Peptone mixture is the nitrogen, vitamins, minerals and amino acids source.

Material required but not provided

Bacteriology incubator

Warning and precautions

- ★ **For in vitro diagnostic use and microbiological control**
- ★ **For professional use only**
- ★ This medium contains products of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not totally guarantee the absence of transmissible pathogenic agents. It is therefore recommended that these products be treated as potentially infectious and handled observing the usual safety precautions (do not ingest or inhale).
- ★ All specimens, microbial cultures and inoculated products should be considered infectious and handled appropriately. Aseptic technique and usual precautions for handling the bacterial group studied should be observed throughout this procedure. Refer to "CLSI/NCCLSM29-A, Protection of Laboratory Workers from Instrument Biohazards and Infectious Disease Transmitted by Blood, Body Fluids and Tissue Approved Guideline- Current Revision". For additional Handling precautions, refer to "Biosafety in Microbiological and Biomedical Laboratories, CDC/NIH, Latest Edition", or to the regulations currently in use in each country.
- ★ Culture media should not be used as manufacturing material or components.
- ★ Do not use reagents after the expiry date.
- ★ Do not use tubes which show signs of contamination.
- ★ Before use, make sure the tamper-proof seal on the bottle screw-caps is intact.
- ★ Microscopic elements, possibly coming from dead microorganisms, may be observed in the broth, but this does not affect the performance of the medium.
- ★ The performance data presented were obtained using the procedure indicated in this package insert. Any change or modification in the procedure may affect the results.



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Storage / Shelf life

- ★ Store the tubes at 2-25°C in their box until the expiry date.

Specimens

This medium can be used to subculture strains or prepare inoculum.

Instruction for use

For use in medical bacteriology:

1. Inoculate the strain to be tested directly into the broth.
2. Incubate at 25°C. The user is responsible for choosing the appropriate temperature for the intended use, in accordance with current standards.
Incubation time varies according to the type of microorganism. The culture may be examined from 48 hours up until 7 days.

For use in industrial bacteriology:

Determination of antifungal activity according to the USP:

Sabouraud Dextrose Broth is used to prepare the calibrated inoculum of *C. albicans* and *A. niger* for inoculation of the product to be tested.

Reading and interpretation

- ★ After incubation, observe the microbial growth, associated with turbidity of the broth.
- ★ Determination of antifungal activity: follow the recommendations of the USP.

Quality control

Protocol:

The nutrient capacity of the medium can be tested using the following strains:

- ★ *Candida albicans* ATCC 10231
- ★ *Aspergillus brasiliensis* ATCC 16404

Range of expected results:

Strain	Result at 20-25 °C
<i>Candida albicans</i> ATCC 10231	Growth within 3 days
<i>Aspergillus brasiliensis</i> ATCC 16404	

Note:

It is responsibility of the user to perform Quality Control taking into consideration the intended use of the medium, and in accordance with any local applicable regulations (frequency, number of strains, incubation temperature, etc.).

Limitations of the method

Growth depends on the requirements of each individual microorganisms. It is therefore possible that certain strains which have specific requirements (growth factors, temperature, incubation, conditions, etc.) may not develop.

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Waste disposal

Dispose of used or unused reagents as well as any other contaminated disposable material following procedures for infectious or potentially infectious products.

It is the responsibility of each laboratory to handle waste and effluents produced according to their nature and degree of hazardousness and to treat and dispose of them (or have them treated and disposed of) in accordance with any applicable regulations.

Literature references

1. Larone D.H.- Medicaly important fungi. A guide to identification- 3rd Ed. – ASM Press, 1995
2. USP 34.

Pack size

	Ref.
Box of 50 tubes (10 ml)	PW 3022
Box of 50 tubes (1 ml)	PW 3207
Box of 50 tubes (5 ml)	PW 3034
Box of 50 glass tubes (10 ml)	PW 3181

