

## Revisions

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**Notes:**

1. BD Cat. Number 296307, 297692, 297139, 297252, 297158, 297354
2. Blank (Sheet) Size: Length: 11"      Width: 8.5"  
 Number of Pages: 2      Number of Sheets: 1  
 Page Size: Length 11"      Width 8.5"      Final Folded Size: NA
3. Style (see illustrations below): # 1



4. See Specification Control Number N/A for Material Information
5. Ink Colors: Printed two sides  Yes     No  
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6. Graphics are approved by Becton, Dickinson and Company. Supplier has the responsibility for using the most current approved revision level

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Label Design	Date	<b>BD</b> Becton, Dickinson and Company 7 Loveton Circle Sparks, MD 21152 USA	Sheet: 1 of 3  Scale: N/A	A	
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Checked By	Date				
Part Number: 8806701JAA		Category and Description Package Insert, Sabouraud Brain Heart Infusion Media			

# BD BBL™ Prepared Tubed and Bottled Selective Sabouraud Brain Heart Infusion Agars for Cultivation of Fungi

Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol, Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Cycloheximide, Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Cycloheximide, Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Gentamicin, Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Gentamicin, Sabouraud Brain Heart Infusion Agar with Gentamicin

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8806701JAA  
2010/07

## INTENDED USE

These media are used in qualitative procedures for the selective isolation and cultivation of pathogenic fungi from clinical and nonclinical specimens.

## SUMMARY AND EXPLANATION

Sabouraud Brain Heart Infusion Agar is based on the formulation of Gorman.<sup>1</sup> The combination of Brain Heart Infusion Agar and Sabouraud Dextrose Agar in this medium improves the recovery of fungi compared with the recovery on either medium individually. The addition of defibrinated sheep blood is recommended to increase the recovery of fastidious, dimorphic fungi.<sup>2,3</sup>

The antimicrobial agents chloramphenicol, cycloheximide and gentamicin are incorporated in various combinations to improve the recovery of pathogenic fungi from specimens heavily contaminated with bacteria and saprophytic fungi.<sup>2</sup>

## PRINCIPLES OF THE PROCEDURE

Sabouraud Brain Heart Infusion Agar consists of a combination of peptones and infusions of brain and heart tissue to supply amino acids and other complex nitrogenous substances. Dextrose is an energy source. Sodium chloride provides essential electrolytes. Disodium phosphate buffers the medium to maintain the pH. Defibrinated sheep blood is added to supply nutrients that induce the growth of dimorphic species in the yeast phase.<sup>2,3</sup>

Chloramphenicol is a broad-spectrum antibiotic that inhibits a wide range of gram-negative and gram-positive bacteria. Cycloheximide is an antifungal agent that is primarily active against saprophytic fungi and does not inhibit pathogenic species. Gentamicin is an aminoglycoside antibiotic that inhibits the growth of gram-negative bacteria.

## REAGENTS

### Sabouraud Brain Heart Infusion Agar

Approximate Formula\* Per Liter Purified Water

Brain Heart, Infusion from (Solids) .....	4.0 g
Peptic Digest of Animal Tissue .....	5.0 g
Pancreatic Digest of Casein .....	10.5 g
Dextrose .....	21.0 g
Sodium Chloride .....	2.5 g
Disodium Phosphate .....	1.25 g
Agar .....	15.0 g

\*Adjusted and/or supplemented as required to meet performance criteria.

Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol contains, per liter, 5% defibrinated sheep blood and 0.05 g chloramphenicol.

Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Cycloheximide contains, per liter, 0.05 g chloramphenicol and 0.5 g cycloheximide.

Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Cycloheximide contains, per liter, 5% defibrinated sheep blood, 0.05 g chloramphenicol and 0.5 g cycloheximide.

Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Gentamicin contains, per liter, 0.05 g chloramphenicol and 0.05 g gentamicin.

Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Gentamicin contains, per liter, 10% defibrinated sheep blood, 0.05 g chloramphenicol and 0.05 g gentamicin.

Sabouraud Brain Heart Infusion Agar with Gentamicin contains, per liter, 0.05 g gentamicin.

## Warnings and Precautions:

For *in vitro* Diagnostic Use.

Tubes and bottles with tight caps should be opened carefully to avoid injury due to breakage of glass.

Pathogenic microorganisms, including hepatitis viruses and Human Immunodeficiency Virus, may be present in clinical specimens. "Standard Precautions"<sup>4-7</sup> and institutional guidelines should be followed in handling all items contaminated with blood and other body fluids. Prior to discarding, sterilize prepared tubes, specimen containers and other contaminated materials by autoclaving.

**Storage Instructions:** On receipt, store tubes and bottles in the dark at 2 to 8°C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed and bottled media stored as labelled until just prior to use may be inoculated up to the expiration date and incubated for up to 6 weeks. Allow the medium to warm to room temperature before inoculation.

**Product Deterioration:** Do not use medium if it shows evidence of microbial contamination, discoloration, drying or other signs of deterioration.

## SPECIMEN COLLECTION AND HANDLING

Refer to appropriate texts for details of specimen collection and handling procedures.<sup>2,3,8</sup>

## PROCEDURE

**Material Provided:** Depending upon which product is ordered, one of the prepared media listed below is provided.

Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol  
Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Cycloheximide  
Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Cycloheximide

Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Gentamicin  
Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol and Gentamicin

Sabouraud Brain Heart Infusion Agar with Gentamicin

**Materials Required But Not Provided:** Ancillary culture media, reagents, quality control cultures and laboratory equipment as required for this procedure.

**Test Procedure:** Observe aseptic techniques. Inoculate the medium as soon as possible after the specimen arrives at the laboratory. Streak the specimen over the surface of the medium with a sterile inoculating loop or needle. Consult appropriate references for information about the processing and inoculation of specimens such as tissues, skin scrapings, hair, nail clippings, etc.<sup>2,3,8-12</sup>

For isolation of fungi causing cutaneous mycoses, a general-purpose, nonselective medium should be inoculated along with a selective medium. Incubate at 25 to 30°C with increased humidity.

For isolation of fungi causing systemic mycoses, two sets of media should be inoculated, with one set incubated at 25 to 30°C and the other set at 35±2°C.

All cultures should be examined at least weekly for fungal growth and should be held for 4 to 6 weeks before being reported as negative.

## User Quality Control:

1. Examine the media for signs of deterioration as described under "Product Deterioration."
2. Check performance by inoculating a representative sample of each medium with pure cultures of stable control organisms that produce known, desired reactions. The following test strains are recommended:

TEST STRAIN	EXPECTED RESULT
<i>Blastomyces dermatitidis</i> ATCC™ 56218	Growth
<i>Candida albicans</i> ATCC 10231	Growth
<i>Trichophyton mentagrophytes</i> ATCC 9533	Growth
<i>Escherichia coli</i> ATCC 25922	Inhibition (partial to complete)
* <i>Aspergillus niger</i> ATCC 16404	Inhibition (partial to complete)

\* Use with Sabouraud Brain Heart Infusion Agar w/CC and Sabouraud Brain Heart Infusion SB Agar w/CC only.

Quality control requirements must be performed in accordance with applicable local, state and/or federal regulations or accreditation requirements and your laboratory's standard Quality Control procedures. It is recommended that the user refer to pertinent NCCLS guidance and CLIA regulations for appropriate Quality Control practices.

## RESULTS

Examine the medium for growth. Microscopic examination of the colony aids in identification.

## LIMITATIONS OF THE PROCEDURE

These prepared media are intended for primary isolation. Some diagnostic tests may be performed with the primary medium. However, a pure culture is recommended for

biochemical tests and other identification procedures. Consult appropriate texts for further information.<sup>3,8-12</sup>

A single medium is rarely adequate for detecting all organisms of potential significance in a specimen. The agents in selective media may inhibit some strains of the desired species or permit growth of a species they were designed to inhibit, especially if the species is present in large numbers in the specimen. Specimens cultured on selective media should, therefore, also be cultured on nonselective media to obtain additional information and help ensure recovery of potential pathogens.

#### PERFORMANCE CHARACTERISTICS

##### Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Gentamicin


Prior to release, all lots of Sabouraud Brain Heart Infusion Agar with Chloramphenicol and Gentamicin are tested for performance characteristics. Representative samples of the lot are inoculated directly by streaking the agar slant with fresh colony growth of *Trichophyton mentagrophytes* ATCC 9533 and *Blastomyces dermatitidis* ATCC 56218 taken from the surface of a BBL Sabouraud Dextrose Agar plate. Additional samples are inoculated with *Candida albicans* ATCC 10231 and *Escherichia coli* ATCC 25922 by streaking the slant with fresh colony growth from a BBL™ Trypticase™ Soy Agar with 5% Sheep Blood plate. Tubes are incubated with loose caps at 20 – 27°C for up to seven days in an aerobic atmosphere. Fair to heavy growth is observed with *T. mentagrophytes*, *B. dermatitidis* and *C. albicans*. No growth is observed with *E. coli*.


#### AVAILABILITY

Cat. No.	Description
296307	BBL™ Sabouraud Brain Heart Infusion Sheep Blood Agar with Chloramphenicol, Pkg. of 10 Mycoflask™ bottles
297692	BBL™ Sabouraud Brain Heart Infusion Agar Slants with Chloramphenicol and Cycloheximide, Ctn. of 100 size C tubes
297139	BBL™ Sabouraud Brain Heart Infusion Sheep Blood Agar Slants with Chloramphenicol and Cycloheximide, Ctn. of 100 size A tubes
297252	BBL™ Sabouraud Brain Heart Infusion Agar Slants with Chloramphenicol and Gentamicin, Pkg. of 10 size C tubes ☑
297158	BBL™ Sabouraud Brain Heart Infusion Sheep Blood Agar Slants with Chloramphenicol and Gentamicin, Pkg. of 10 plastic flasks
297394	BBL™ Sabouraud Brain Heart Infusion Agar with Gentamicin, Ctn. of 100 size 1 oz. bottles


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
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JJJJ-MM-TT / JJJJ-MM (MM = Monatsende) /  
EEEE-MM-HH / EEEE-MM (MM = τέλος του μήνα) /  
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AAAA-LL-ZZ / AAAA-LL (LL = sfârșitul lunii) /  
YYYY-AA-GG / YYYY-AA (AA = ayın sonu) /  
GGGG-MM-DD / GGGG-MM (MM = kraj meseca) /  
ГГГГ-ММ-ДД / ГГГГ-ММ (ММ = конец месяца) /  
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GGGG-MM-DD / GGGG-MM (MM = kraj mjeseca)


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