Sabouraud Dextrose Broth, SDB (i23163)

Sabouraud Dextrose Broth (SDB) is used for the cultivation of yeasts and molds.

Industry: Clinical / Food / Pharmaceutical / Veterinary / Quality Control

Principles & Uses

Sabouraud Dextrose Agar and Broth are formulations designed for cultivating fungi, especially those linked to skin infections. Carlier's modification of Sabouraud's original formulation enhances its efficacy. Both media employ peptone, derived from meat and casein, supplying essential nutrients and growth factors. Dextrose acts as an energy source for microbial growth. The low pH inhibits bacterial contamination, favoring fungal growth. This acidity makes the medium particularly useful for cultivating fungi and aciduric microorganisms. Simultaneous inoculation with a selective medium is recommended for isolating fungi from contaminated specimens.

Its high dextrose concentration and low pH create a selective environment inhibiting bacterial growth and promoting fungal spore formation. The Broth is a modification of Sabouraud Dextrose Agar, lacking agar and having half the dextrose concentration. This liquid medium is recommended by the European Pharmacopoeia and the USP for testing *Candida albicans* in non-sterile products, demonstrating its applicability in microbial enumeration tests and Candida albicans examination.

Composition (gr/L)

Dextrose 20 g, Pancreatic digest of casein 5 g, Peptic digest of animal tissue 5 g.

Final pH at 25°C 5.6 ± 0.2

Preparation from dehydrated Powder

Suspend 30 g of the powder in 1 liter of purified water. Mix thoroughly. Autoclave at 121°C for 15 minutes.

Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, clear.

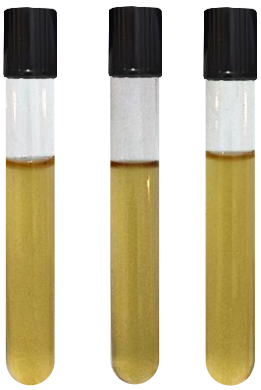
Reaction of 3.0% Solution at 25°C: pH 5.6 ± 0.2

Cultural Response

Inoculate tubes and incubate at 30 ± 2°C for 18 - 48 hours or up to 7 days if necessary. For (**) culture inoculate a 125 mL bottle and incubate at 30 - 35°C for 48 hours. For (***) culture inoculate a 125 mL bottle and incubate at 20-25°C for 3 days.

Organism (ATCC*)	Recovery
Aspergillus brasiliensis (niger) (16404)	Good
Candida albicans (10231)	Good
Lactobacillus casei (9595)	Good
Saccharomyces cerevisiae (9763)	Good
*Candida albicans*** (10231)	Growth
*Candida albicans**** (10231)	Growth

*ATCC is a registered trade mark of the American Type Culture Collection.



Saccharomyces cerevisiae (left). *Lactobacillus casei* (middle). *Candida albicans* (right). All of them show luxuriant grow.

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.