

Technical Data Sheet

Sabouraud Dextrose Broth (SDB)

Ordering number: 1.46366.0010

Sabouraud Dextrose Broth (SDB) is designed for the cultivation of yeasts and molds as well as for the determination of the fungistatic activity of pharmaceutical products.

The formulation of the basic medium (Sabouraud Dextrose Broth) is prepared according to the recommendations of the current European and United States Pharmacopoeia (EP, 2.6.13 and USP, 62).

Mode of Action

Sabouraud Dextrose Broth (SDB) is a complex medium for cultivation and isolation of yeasts, molds and dermatophytes. The media is used for microbiological examination of non-sterile products. The high concentration of Dextrose in addition with the low pH promotes the growth of yeast and molds while inhibiting bacterial growth. The media also promotes the formation of spores (conidia and sporangia) as well as the formation of pigments of yeasts and molds.

Typical Composition

Casein Peptone	5 g/l
Meat Peptone	5 g/l
Dextrose	20 g/l

The appearance of the medium is clear and yellowish. The pH value is in the range of 5.4-5.8. The medium can be adjusted and/or supplemented according to the performance criteria required.

Application and Interpretation

Sabouraud Dextrose Broth, provided in bottle, can be used to subculture strains or prepare sample.

For strain subculture, the strain to be examined is directly inoculated into the broth and incubated at 20-25°C. The incubation time varies according to the type of microorganism (2 to 3 days for *C. albicans*). After incubation, the microbial growth can be observed by turbidity of the broth.

For sample preparation, the product to be tested should be prepared as described in EP (2.6.12). 10 ml or the quantity corresponding to not less than 1 g or 1 ml is inoculated into 100 ml of Sabouraud Dextrose Broth and mixed. The broth is then incubated at 30-35°C for 3-5 days. Subculture is performed on a plate of Sabouraud Dextrose Agar (Article No: 146236) and incubated at 30-35°C for 24-48 h.

Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +2 °C to +25 °C.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Control Strains	ATCC#	Inoculum CFU	Incubation	Expected Result Recovery in %
Candida albicans	10231	10-100	3 d at 30-35 °C	Good growth, sediment
			4 d at 20-25 °C	Good growth, sediment
Candida glabrata	70614 (DSM)	10-100	4 d at 20-25 °C	Good growth, sediment
Microsporum gypseum	24102	Dense suspension	4 d at 20-25 °C	good growth, cotton- wool-like surface growth
Trichophyton rubrum	28188	Dense suspension	4 d at 20-25 °C	good growth, cotton- wool-like surface growth

Please refer to the actual batch related Certificate of Analysis.

Literature

European Pharmacopoeia 8.0 (2014): 2.6.12. Microbial examination of non-sterile products (total viable aerobic count); 2.6.13. Microbiological examination of non-sterile products (test for specified microorganisms)

Mac Faddin, J.J. (1985): Media for Isolation- Cultivation- Identification- Maintenance of Medical Bacteria. Vol. I. Williams & Wilkins, Baltimore, London, p. 687-691.

United States Pharmacopoeia 38 NF 33 (2015): <61> Microbiological Examination of Non-Sterile Products: Microbial Enumeration Tests; <62> Microbiological Examination of Non-Sterile Products: Test for Specified Microorganisms.

Ordering Information

Product	Cat. No.	Pack size
Sabouraud Dextrose Broth (SDB)	1.46366.0010	10 x 100 ml bottles
ReadyPlate™ SDA (Sabouraud Dextrose Agar) acc. ISO, FDA-BAM, EP + USP	1.46236.0020	20 x 90 mm plates

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