

Sabouraud Dextrose Agar | Ready-to-use Media

a product by **Biomed MDX**

Effective Date: 20/05/2024

REF FP90S1002

Intended Use:

A medium for the cultivation of pathogenic and nonpathogenic fungi, particularly yeasts and molds.

Principle of the Procedure:

Sabouraud Dextrose Agar contains mycological peptone and dextrose to support growth of fungi. It is slightly acidic which helps to inhibit bacteria whilst being favourable to fungi.

Product Summary:

Infections associated with dermatophytes, other fungi and yeasts, are increasingly becoming a health problem, especially in developed countries. The diffusion of immunodeficiencies-related diseases, together with advanced medical techniques used, including intensive care units, organ transplants and the indiscriminate prescription of antimicrobials have inevitably led to an increased number of immunocompromised patients, and created the ideal conditions for the development of opportunistic fungal infections. Dermatophytes are a group of filamentous fungi able to utilize keratin found in skin, hair or nails which can damage these tissues. The most frequent types of infections are *Tinea capitis*, *Tinea pedis* and *Tinea unguium*, involving head, feet and nails of the patient respectively¹. They are responsible for most of the superficial mycosis known as 'dermatophytosis' and affecting about 20-25% of the worldwide population. Dermatophyte fungi include three genera occupying different ecological niches, but they are all associated to human clinical conditions with *Trichophyton rubrum* being the most common². Overall, dermatophyte infections are very common and rarely invasive because of the inability of these organisms to infect non-keratinised tissues, such as internal tissues and organs. However, the severity of the condition is always dependent on the host's immune response, the virulence of the species involved and the environmental conditions¹.

Formulation* (PER LITER):

Mycological peptone	10.0g	Agar	15.0g
Glucose	40.0g		

pH 5.6 +/- 0.2

*Adjust and/or supplemental as required to meet performance criteria

Procedure

Materials Provided

90mm SDA Agar.

Materials Required But Not Provided

Ancillary culture media, reagents, and laboratory equipment as required.

Test Procedure

1. Inoculate and streak the specimen as soon as possible after it is received in the laboratory with an aseptic technique.
2. Incubate at $35 \pm 2^{\circ}\text{C}$ for 72 hours.
3. Observe the result according to user requirements.
4. Dispose of all used reagents and contaminated materials as infectious waste. Laboratories must handle and dispose of all waste safely according to regulations.

Results

Examine for fungal colonies exhibiting typical microscopic and colonial morphology. Appropriate biochemical or immunological tests may be required for final identification

Quality Control

Inoculate representative samples with the following strains. Incubate the inoculated plates at $35 \pm 2^{\circ}\text{C}$ for 72 hrs. to allow colonies to develop on the medium.

Strains	ATCC®	Growth Results
<i>Candida albicans</i>	60193	Growth at 72 hours
<i>Trichophyton mentagrophytes</i>	9533	Growth at 72 hours
Uninoculated plate	-	No growth

Transportation:

Temperature fluctuations may occur during transportation. However, these fluctuations do not affect the performance, quality, or safety of the media.

Storage and Shelf Life:

Upon receipt, store plates at 2 to 8°C , in their original sleeve wrapping until just before use. Avoid freezing and overheating. The plates may be inoculated up to the expiration date (see package label) and incubated for the recommended incubation times.

Warning and Precautions:

For in vitro diagnostic use. For Professional Use Only. Do Not Reuse.
Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration.

Limitations of the Procedure

This medium is for laboratory use only and is not intended for the diagnosis of disease or other conditions. Identifications are presumptive and colonies should be identified using appropriate methods

Reference

- Public Health England. 2016a. "UK Standards for Microbiology Investigations Investigation of Dermatological Specimens for Superficial Mycoses Investigation of Dermatological Specimens for Superficial Mycoses-Standards- for-Microbiology-Investigations-Smi-Quality-and-Consistency-in-Clinical-Laboratories."
- Achterman, R. R., & White, T. C. (2013). Dermatophytes. *Current Biology*, 23(13), R551– R552.
<https://doi.org/10.1016/j.cub.2013.03.026> CURBI O 23: R551–52. <https://doi.org/10.1016/j.cub.2013.03.026>.

Packaging Symbol

Symbol	Definition
	Catalogue number
	In Vitro Diagnostic Medical Device
	Batch code
	Date of manufacture
	Temperature limit
	Use-by date
	Keep away from sunlight
	Do not re-use
	Fragile, handle with care
	Consult instructions for use or consult electronic instructions for use
	Do not use if packaging damaged and consult instructions for use
	Manufacturer

Further Information:

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