

PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

Cat No. PD269 – RPMI + MOPS + 2% GLUCOSE

Intended Use:

RPMI 1640 Agar with MOPS & 2% Glucose is used for determination of susceptibility of micro-organisms to antifungal agents.

Principle and Uses:

Invasive fungal infections have been increased over the past two decades. Due to the life-threatening nature of these infections and reports of drug resistance, susceptibility testing of yeast pathogens has become very important. The CLSI have published a reference method for broth dilution antifungal susceptibility testing of Yeast. Also, for use with the gradient-strip method when testing *Candida* spp. directly from colonies grown on nonselective media.

RPMI is the recommended medium for susceptibility testing of yeasts and molds; it contains low level of antifungal antagonists, allowing the performance of the test with greater confidence.

RPMI-1640 Agar can be used to determine MIC values for various antifungal agents. Amino acids, vitamins and salts provide essential nutrients. Glucose is the carbohydrate source. MOPS buffers the media. Agar acts as solidifying agent.

RPMI-MOPS-Glucose plates are also provided with Etest strips for the direct quantification of antifungal susceptibility testing in terms of MIC values.

Available Etest strips, according to the user's choice.

Etest Strips:

Amphotericin B
Fluconazole
Ketoconazole

Type of specimen

Clinical samples: Isolated microorganism from urine, stool, blood etc.

Limitations

1. This medium is recommended for susceptibility testing of pure cultures only.
2. Inoculum density may affect the zone size. Heavy inoculum may result in smaller zones or too less inoculum may result in bigger zones.
3. As antifungal susceptibility is carried with sensitivity disc, proper storage of the disc is desired which may affect the potency of the disc.
4. Under certain circumstances, the in vitro results of antibiotic susceptibility may not show the same in vivo.

Composition

Sodium Hydrogen Carbonate NaHCO_3 - 2 g/L

MOPS – 34.5 g/L

Agar - 15 g/L

Dextrose (Glucose) - 20 g/L

RPMI 1640 nutrients (HIMEDIA SKU: M1972 - <https://www.himediadownloads.com/EIFU/M1972.pdf>) – 10.4 g/L

Storage: 2-8°C
Appearance: light amber
pH Range: 6.9 - 7.1

Package contents: 10 plates in a package
Exp. Date: Printed on label and on the item.
Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Waste Disposal
After interpretation all plates should be destroyed by standard incineration methods.

Performance Testing Results
E-test for antifungal susceptibility testing.
Suspend colonies from fresh culture in 5 ml saline solution (0.5 McFarland).

Test	ATCC	Incubation Temp. (°C)	Incubation Cond	Reaction 1	
<i>Candida albicans</i>	90028	33-37 °C	Aerobic, 24-48 hours	Growth	Amphotericin B mic: 0.125-0.5 microgram/ml
<i>Candida parapsilosis</i>	22019	33-37 °C	Aerobic, 24-48 hours	Growth	Amphotericin B mic: 0.25-1.0 microgram/ml
<i>Candida kruzei</i>	6258	33-37 °C	Aerobic, 24-48 hours	Growth	Amphotericin B mic: 0.5-2.0 microgram/ml