

Mueller Hinton Agar



Medium used for antimicrobial susceptibility testing of rapidly growing aerobic microorganisms by the disk diffusion technic.

• CONTENTS (Liter)

Beef Extract	2.0 g
Casamino Acids	17.5 g
Starch	1.5 g
Agar	17.0 g
Final pH = 7.3 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 38.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. If necessary, add 5% of Sheep Blood Defibrinated (MB-S1876). Mix well. Dispense in petri dishes.

• INTERPRETATION

Mueller Hinton Agar is a medium used for antimicrobial susceptibility testing of rapidly growing aerobic microorganisms by the disk diffusion technic. Beef extract and casamino acids provide nitrogen, carbon, vitamins and minerals. Starch neutralize toxic substances. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Press the disc containing the antimicrobial on the agar surface. Incubate at 36 ± 1 °C for 24 hours and then measure the inhibition zone. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: slightly opalescent.

Color: light amber.

Incubation conditions: 36 ± 1 °C / 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	25922	50-100	good
<i>Pseudomonas aeruginosa</i>	27853	50-100	good
<i>Staphylococcus aureus</i>	25923	50-100	good
<i>Enterococcus faecalis</i>	29212	50-100	good

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Bauer et al. (1966). J. Clin. Pathol. 45:493-496.
2. Mueller, J.H., and Hinton. 1941. Proc. Soc. Exp. Biol. Med. 48: 330-333.
3. NCCLS. Performance standards for susceptibility testing; Twelve Informational Supplement. NCCLS Document M100-S12, January 2002.

• PACKAGE

Cat. No : MB-M1033 Mueller Hinton Agar	500 G
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• MICROBIAL CULTURE IMAGES



Pseudomonas aeruginosa
ATCC 27853 (100CFU)



Escherichia coli
ATCC 25922 (100CFU)



Staphylococcus aureus
ATCC 25923 (100CFU)

Incubation conditions : 36±1°C 18h