# **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 = $7.3 \pm 0.2$ at $25^{\circ}$ C.	9

### 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  $\pm$  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  $\pm$  1 °C / 24 hours

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

#### STORE

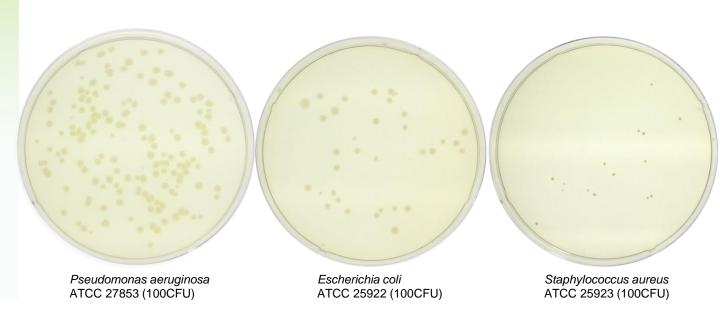
The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

#### 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

## MICROBIAL CULTURE IMAGES



Incubation conditions: 36±1°C 18h

