

Mueller Hinton Broth (Cation-Adjusted)



Medium used for quantitative susceptibility testing of gram-negative and gram-positive aerobic bacteria with a variety of antimicrobial agents.

• CONTENTS (Liter)

Meat Extract	2.0 g
Casamino Acids, Technical	17.5 g
Starch	1.5 g
Final pH = 7.3 ± 0.1 at 25°C.	

• PROCEDURE

Suspend 21.0 G of powder in 1 L of distilled or deionized water. Heat to dissolve completely. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Aseptically add 2 vials of Mueller Hinton Broth (Cation-Adjusted) supplement (MB-M3031) and 3~5% Horse Blood Lysed (MB-H1885). Mix well. Dispense into tubes.

Mueller Hinton Broth (Cation-Adjusted) supplement

1 vial contents (Each vial is sufficient for 500 mL of medium)

Calcium Chloride	0.025 g
Magnesium Chloride	0.01 g

• INTERPRETATION

Mueller Hinton Broth (Cation-Adjusted) is a medium used for quantitative susceptibility testing of gram-negative and gram-positive aerobic bacteria with a variety of antimicrobial agents. Meat extract and casamino acids provide nitrogen, carbon, vitamins and minerals. Starch neutralizes toxic substances. Calcium chloride and magnesium chloride salts to produce correct MICs (Minimal inhibitory concentrations) with aminoglycosides and *Pseudomonas aeruginosa*.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganisms. Incubate at 35 ± 2°C for 24 hours.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: clear to slightly hazy.

Color: red.

Incubation conditions: 35 ± 2°C / 24 hours

Microorganism	ATCC	Iniculum CFU	Growth
<i>Enterococcus faecalis</i>	29212	10 ⁵	good
<i>Escherichia coli</i>	25922	10 ⁵	good
<i>Pseudomonas aeruginosa</i>	27853	10 ⁵	good
<i>Staphylococcus aureus</i>	25923	10 ⁵	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 are evident. Store prepared plates at 2-6°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-M0793 Mueller Hinton Broth (Cation-Adjusted)	500 G
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