

MM0135

Mueller Hinton Agar

Use and description:

Mueller Hinton Agar is recommended for antibiotic susceptibility testing by the National Committee for Clinical Laboratory Standards (NCCLS). The medium has a very low thymine and thymidine content, to enable trimethoprim and sulphonamide testing as well as appropriate levels of calcium and magnesium ions ensure correct zone sizes with aminoglycoside and tetracycline antibiotics.

Composition per liter:

Agar.....	15.0 g
Peptones	17.5 g
Beef Infusion solids	4.0 g
Starch	1.5 g

Final pH of the ready to use medium: 7.3 ± 0.2

Medium preparation:

Add 38.0 grams of dehydrated culture medium to 1 liter of distilled water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave for 15 min at 121°C. Prepare 5% blood agar by adding appropriate volume of sterile defibrinated horse blood to melted sterile agar medium cooled to 45-50°C.

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.
Ready to use medium: hazy and yellow in colour.

Microbiological response:

Organism	Result
<i>Staphylococcus aureus</i> ATCC 25923	Growth, zone diameters within published specification
<i>Pseudomonas aeruginosa</i> ATCC 27853	Growth, zone diameters within published specification
<i>Escherichia coli</i> ATCC 25922	Growth, zone diameters within published specification
<i>Enterococcus faecalis</i> ATCC 29212	Growth, zone diameters for SXT within published specification

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.