



MUELLER HINTON AGAR

INTENDED USE

Mueller Hinton agar is used in antimicrobial susceptibility testing by the disk diffusion method.

FORMULA

Ingredients in grams per liter of purified water

Peptone	17.50
Meat extract	2.00
Soluble starch	1.50
Agar	17.00

Adjusted and/or supplemented as required to meet performance criteria.

STORAGE

Bottles: 2 - 8°C

Dehydrated media: 2 - 30°C

The expiration date on the product label applies to the product in its intact packaging when stored as directed.

DIRECTIONS FOR PREPARATION

For dehydrated media

1. Dissolve 38 g in 1 L of purified water. Mix thoroughly.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave for 15 minutes at 121°C.

For bottle media

1. Heat the bottle at 95-100°C in water bath.
2. Mix well and cool to 45-47°C.
3. Pour in Petri plate and let solidified on a cool horizontal surface.

LIMITATION OF THE PROCEDURE

This product is for laboratory use only.

Variation in the concentration of divalent cations, primarily calcium and magnesium affect result of aminoglycoside, tetracycline, and colistin test with *Pseudomonas aeruginosa*.

QUALITY CONTROL

Physical appearance: Prepared medium is solid, light beige

Final pH: 7.3 ± 0.2 at 25°C

Expected Cultural Response

Organism	Inoculum CFU	Incubation	Results
<i>Escherichia coli</i> ATCC 25922 • WDCM 00013	10-10 ²	24-48 h at 35-37°C	Growth
<i>Staphylococcus aureus</i> ATCC 6538 • WDCM 00032	10-10 ²	24-48 h at 35-37°C	Growth

This is an example of organisms routinely used for testing

REFERENCE

1. Mueller J.H. and Hinton J. 1941. Protein-free medium for primary isolation of *gonococcus* and *meningococcus*. Proc. Soc. Exp. Biol. and Med. **48**:330-333.
2. Ericsson and Sherris. 1971. Acta Pathol. Microbiol. Scand. Suppl. 217.
3. Clinical and Laboratory Standards Institute. 2010. Approved standard M2-A10. Performance standards for antimicrobial susceptibility tests, 10th ed. CLSI, Wayne, Pa.
4. European Committee on Antimicrobial susceptibility testing (EUCAST). 2009. Media preparation for disc diffusion testing V1.0.