

RTA.KK.196 Revision Date/Revision Number:-/0 Issue Date: 01.11.2014

MUELLER HINTON AGAR (150 MM)

INTENDED USE:

Mueller Hinton Agar is used for determination of susceptibility of microorganisms to antimicrobial agents.

PRINCIPLE AND INTERPRETATION:

The major use of Mueller Hinton Agar is for antimicrobial susceptibility testing. It has become the standard medium for the Bauer-Kirby method and its performance is specified by the NCCLS.

Beef infusion and casein provide nitrogenous compounds, vitamins, carbon, sulphur and amino acids in Mueller Hinton Agar. Starch is added to absorb any toxic metabolites produced.

COMPOSITION:

Ingredients	Gr/Liter
Beef, dehydrated infusion from	2 gr
Casein hydrolysate	17,5 gr
Starch	1,5 gr
Agar	17 gr

^{***}Formula adjusted, standardized to suit performance parameters

pH: $7,3 \pm 0,2$

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

Inoculation: Surface, inoculum as described by N.C.C.L.S.

Incubation: As recommended by methodology for particular organisms and antibiotics by NCCLS.

QUALITY CONTROL:

1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Phsical/Chemical Control

 $pH: 7,3 \pm 0,2$

Apperance: Light amber

3.Microbiological Control: Cultural response on Mueller Hinton Agar at 35± 2 °C after 24 and 48 hours incubation.

Microorganism	Inoculum	Results	
	(CFU)	Growth	Reaction
Escherichia coli ATCC 25922	10-100	Good	Good
PSeudomonas aeruginosa ATCC 27853	10-100	Good	Good
Enterococcus faecalis ATCC 29212	10-100	Good	Good
Staphylococcus aureus ATCC 25923	10-100	Good	Good

LIMITATIONS OF THE PROCEDURE:

Mueller Hinton Agar is not appropriate for assay by disc diffusion method with slow growing organisms, anaerobes and capnophiles.

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.



Technical Data Sheet

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DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02062 Packaging: Single wrap

Content: 5 plates/each package

REFERENCES:

- 1. Bauer A. W., Kirby W. M., Sherris J. C. and Turck M. (1966) Amer. J. Clin. Path. 45. 493-496.
- 2. Ryan K. J., Schoenknecht F. D. and Kirby W. M. (1970) Hosp. Pract. 5. 91-100.
- 3. National Committee for Clinical Laboratory Standards (2000) Performance Standards for Antimicrobial Disk Susceptibility Tests. 4th Edn. Approved Standard M2-A7. NCCLS. Villanova Pa.
- 4. Pollock H. M. et al. (1986) J. Clin. Microbiol. 24. 1-6.

