

RTA.KK.395 Revision Date/Revision Number:-/0 Issue Date: 15.03.2017

MUELLER HINTON BROTH (9 ML)

INTENDED USE:

Mueller Hinton Broth is a general-purpose medium that may be used in the cultivation of a wide variety of fastidious and nonfastidious microorganisms.

PRINCIPLE AND INTERPRETATION:

Acid hydrolysate of casein and beef extract supply amino acids and other nitrogenous substances, minerals, some vitamins and other nutrients to support the growth of microorganisms. Starch acts as a protective colloid against toxic substances that may be present in the medium. Hydrolysis of the starch during autoclaving provides a small amount of dextrose, which is a source of energy.

COMPOSITION:

Ingredients	Gr/Liter
Acid Hydrolysate of Casein	17,5 gr
Beef Extract	3 gr
Starch	1,5 gr

***Formula adjusted, standardized to suit performance parameters **pH**: $7,4 \pm 0.2$

PRECAUTIONS:

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

TEST PROCEDURE:

Incubation at a temperature of 35±2°C and observed after 24 hours.

QUALITY CONTROL:

1.Sterility Control:

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

2.Phsical/Chemical Control

pH: $7,4 \pm 0,2$ **Apperance:** Pale yellow solution.

3.Microbiological Control: Incubation at a temperature of 35±2°C and observed after 24-72 hours.

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

LIMITATIONS OF THE PROCEDURE:

Enrichment broths should not be used as the sole isolation medium. They are to be used in conjunction with selective and nonselective plating media to increase the probability of isolating pathogens, especially when they may be present in small numbers. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification. Consult appropriate texts for further information.

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.



RTA.KK.395 Revision Date/Revision Number:-/0 Issue Date: 15.03.2017

DISPOSAL:

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

PACKAGING: Katalog Number: 01070 Contont/Packaging: 50 Tubos /

Content/Packaging: 50 Tubes/Box

REFERENCES:

1. Mueller, J.H., and J. Hinton. 1941. A protein-free medium for primary isolation of he gonococcus and meningooccus. Proc. Soc. Exp. Biol. Med. 48:330-333.

2. Clinical and Laboratory Standards Institute. 2009. Approved standard M7-A8. Methods for dilution antimicrobial susceptibility tests for bacteria that grow aerobically, 8th ed. CLSI, Wayne, Pa.

3. Clinical and Laboratory Standards Institute. 2009. Approved standard M2-A10. Performance standards for

antimicrobial disk susceptibility tests, 10th ed. CLSI, Wayne, Pa.

4. Washington, J.A. (ed.). 1985. Laboratory procedures in clinical microbiology, 2nd ed. Springer-Verlag, New York.

5. Forbes, B.A., D.F. Sahm, and A.S. Weissfeld. 1998. Bailey & Scott's diagnostic microbiology, 10th ed. Mosby, Inc., St. Louis.

6. Murray, P.R., E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Yolken (ed.). 1995. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.

7. Holt, J.G., N.R. Krieg, P.H.A. Sneath, J.T. Staley, and S.T. Williams (ed.). 1994. Bergey's Manual[™] of determinative bacteriology, 9th ed. Williams & Wilkins, Baltimore.

