HiCombi™ Dual Performance Medium

LQ033

Intended use

Recommended for rapid growth of Enterobacteria, *Pseudomonas*, Staphylococci and *Candida*. Combination of solid (7 ml) and liquid (20 ml) media in single bottle.

Composition**

Ingredients	g / L
Solid	7.000 ml
HM infusion powder #	12.500
BHI powder	5.000
Proteose peptone	10.000
Dextrose (Glucose)	2.000
Sodium chloride	5.000
Disodium phosphate	2.500
Agar	15.000
Liquid	20.000 ml

Same as solid media without Agar
**Formula adjusted, standardized to suit performance parameters
Equivalent to Calf brain infusion from

Directions

Label the ready to use LQ033 bottle. Remove the top seal of the cap. Disinfect the part of the rubber stopper which is now exposed. Transfer the sample immediately into the culture bottle by puncturing the rubber stopper with the needle. Venting: Use sterile venting needle (LA038). Keep the bottle in an upright position preferably in a biological safety cabinet, place an alcohol swab over the rubber stopper and insert the venting needle with filter through it. Insertion and withdrawal of the needle should be done in a straight line. Discard the needle and mix the contents by gently inverting the bottle 2-3 times. Do not vent the bottle for anaerobic cultures. Incubate at 30-35°C for 18-24 hours and further for seven days. Recommended volume of blood to be tested in LQ033: 3-5 ml (For Pediatric use).

Principle And Interpretation

BHI Medium is useful for cultivating a wide variety of microorganisms since it is a highly nutritive medium. It is also used to prepare the inocula for antimicrobial susceptibility testing. BHI Broth is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth (1). BHI Broth is also the preferred medium for anaerobic bacteria, yeasts and moulds (2,3). This medium is nutritious and well buffered to support the growth of wide variety of organisms (3,4,5).

Proteose peptone, HM infusion powder and BHI powder serve as sources of carbon, nitrogen, essential growth factors, amino acids and vitamins. Dextrose serves as a source of energy. Disodium phosphate helps in maintaining the buffering action of the medium whereas sodium chloride maintains the osmotic equilibrium of the medium.

Type of specimen

Clinical samples : Blood

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (8,9).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Further biochemical and serological testing is required for complete identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

In a sterile glass bottle combination of broth and one agar coated surface.

Colour of Agar medium
Yellow coloured medium

Colour of liquid medium
Amber coloured solution

Quantity of medium

7ml of solid medium in glass bottle 20ml of liquid medium in glass bottle

pH of Agar medium
7.20- 7.60

pH of liquid medium
7.20- 7.60

Sterility Check

Passes release criteria

Cultural response

Cultural characteristics was observed after incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth in liquid medium	Growth on agar medium
Candida albicans ATCC 10231 (00054*)	50-100	Luxuriant	Luxuriant
Haemophilus influenzae ATCC 19418	50-100	Luxuriant	Luxuriant
Pseudomonas aeruginosa ATCC 27853 (00025*)	50-100	Luxuriant	Luxuriant
Streptococcus pyogenes ATCC 19615	50-100	Luxuriant	Luxuriant
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	50-100	Luxuriant	Luxuriant
Neisseria meningitidis ATCC 13090	50-100	Luxuriant	Luxuriant
Streptococcus pneumoniae ATCC 6303	50-100	Luxuriant	Luxuriant

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

On receipt store between 15-30°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (6,7).

Reference

1.Rosenow, 1919, J. Dental Research, 1:205.

2.Atlas R. M., 1993, Handbook of Microbiological Media, 147-153, CRC Press, Boca Raton, FL.

3.MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

4.Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc., New York.

5.Roseburg T. et al, 1944, J. Inf. Dis., 74:

6.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

7.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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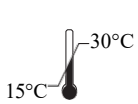
IVD ***In vitro* diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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www.cepartner4u.eu

CE Marking

Do not use if package is damaged

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