HiCrome™ Enterococci Broth

M1376

Intended use

Recommended for the identification and differentiation of Enterococci from water samples and clinical samples.

Composition**

Ingredients	Gms / Litre
Peptone, special	10.000
Sodium chloride	5.000
Sodium azide	0.300
Chromogenic substrate	0.040
Polysorbate 80 (Tween 80)	2.000
Disodium hydrogen phosphate	1.250
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 37.18 grams (double strength) or 18.59 grams (single strength) in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121° C) for 15 minutes.

Principle And Interpretation

HiCrome™ Enterococci Broth is formulated on the basis of the work carried out by Althous et al (1), Amoras (2), Litsky et al (6), and Manafi and Sommer (7) and Snyder and Lichstein (8). These media is recommended for the rapid detection of Enterococci from water samples. The presence of *Enterococcus* group, which is a subgroup of the faecal Streptococci, serves as a valuable bacterial indicator for determining the extent of faecal contamination (1, 9) and it is more specific than the detection of coliforms, which may originate from non-faecal sources. The enzyme ß-glucosidase produced by Enterococci cleaves the chromogenic substrate, resulting in a bluish green colour.

The medium contains peptone special, which provides carbonaceous, nitrogenous compounds, long chain amino acids, vitamins and other essential nutrients. Sodium chloride maintains the osmotic balance of the medium. Sodium azide inhibits the accompanying microflora, especially gram-negative organisms. Polysorbate 80 acts as a source of fatty acids.

Type of specimen

Clinical samples - faeces; water samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).
For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards(3).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic 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. Some species may show poor growth due to nutritional variations.
2. Slight colour variations may be observed depending upon the utilization of the substrate by the organism.

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
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Light amber coloured, clear solution in tubes

Reaction
Reaction of 1.86% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH
7.30-7.70

Cultural Response
Cultural characteristics observed after an incubation at 35- 37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth	Colour of Medium
Escherichia coli ATCC 25922 (00013*)	50-100	none-poor	light yellow
Enterococcus faecalis ATCC 29212 (00087*)	50-100	luxuriant	Light blue-green
Pseudomonas aeruginosa ATCC 27853 (00025*)	50-100	none-poor	light yellow
Staphylococcus aureus subsp. *aureus ATCC 25923* (00034*)	50-100	none-poor	light yellow

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 15-25°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. 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 (4,5).

Reference

1. Althous, H., Dott, W., Havemeister, G, Muller, H.E, a. Sacre,C., 1982, Zbl. Bakt. Hyg. I. Abt. Orig. A. 252:154-165.
2. Amoras I, 1995, Poster presentation congress of Spanish Society of Microbiology, Madrid.
3. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. 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.
6. Litsky, W., Mallmann, W.L., a Fifield, C.W. 1953, Amer. J. Pbl. Hlth. 43:873-879.
7. Manafi M., and Sommer R, 1993, Wat. Sci. Tech. 27:271-274.
8. Snyder M.L., and Lichstein, H.C. 1940, J. Infect. Dis. 67. 113-115
9. Standard Methods for the Examination of Water and Wastewater, 20th Edition, Edited by L.S. Clesceri, A.E. Greenberg and A.D. Eaton, Published by APHA, AWWA and WEF (1998).

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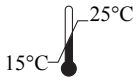
IVD — In vitro diagnostic medical device

CE Marking



Storage temperature

Do not use if package is damaged

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