



Vancomycin Resistant Enterococci (VRE) Broth Base

M1762

Vancomycin Resistant Enterococci (VRE) Broth Base is recommended for enrichment of *Enterococcus* species including Vancomycin Resistant Enterococci

Composition**

Ingredients	Gms / Litre
Brain Heart Infusion Powder	12.500
Heart Infusion Powder	5.000
Proteose Peptone	10.000
Dextrose	2.000
Sodium chloride	5.000
Disodium Phosphate	2.500
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 37.0 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add rehydrated contents of 2 vials of Meropenem Supplement (FD262). Mix well and dispense as desired.

Principle And Interpretation

Enterococci usually occur as the normal flora of the intestines of mammal. The presence of enterococci is an indication of faecal contamination (1). The increasing development of multiple resistance towards antibiotics particularly vancomycin by enterococci is a serious threat to the world (2). Vancomycin-resistant *Enterococcus* (VRE) is the name given to a group of bacterial species of the genus *Enterococcus* that are resistant to the antibiotic vancomycin. Vancomycin resistant Enterococci broth is formulated as per the recommendations of Centre for Disease Control and Prevention (CDC) for the enrichment of *Enterococcus* species including vancomycin resistant enterococci (3). Brain Heart Infusion powder, heart infusion powder and proteose peptone supplies nutrients to the medium. Dextrose serves as an energy source. Sodium chloride maintains the osmotic balance while disodium phosphate buffers the medium. Meropenem Supplement (FD262) added to the medium helps to suppress the contaminating flora especially gram-negative bacteria.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Light yellow coloured clear solution without any precipitate.

Reaction

Reaction of 3.7% w/v aqueous solution at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural Response

M1762: Cultural characteristics observed with added Meropenem supplement (FD262), after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth
Cultural Response <i>Escherichia coli</i> ATCC 25922	>=10 ³	inhibited
<i>Pseudomonas aeruginosa</i> ATCC 27853	>=10 ³	inhibited

<i>Salmonella Typhimurium</i> ATCC 14028	$\geq 10^3$	inhibited
<i>Enterococcus faecalis</i> ATCC 29212	$\geq 10^3$	inhibited
<i>Enterococcus faecalis</i> ATCC 51299	50-100	Good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

- 1.Mara D., Horan NJ : The Handbook of water, wastewater and microbiology , Amsterdam, The Netherlands , Academic Press ; 2003.
- 2.Mascini EM, Bonten MJ : Vancomycin- resistant enterococci : consequences for therapy and infection control . Clin Microbiol Infect.2005,11 (Suppl.4) :43-56
- 3.CDC Preventing the spread of vancomycin resistance: a report from the Hospital Infection Control Practices Advisory Committee (1994). Fed Regist. May17.

Revision : 1 / 2011



Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.