

# TM 1643 - VRE BROTH BASE (VANCOMYCIN RESISTANT ENTEROCOCCI BROTH)

#### **INTENDED USE**

For the isolation of Vancomycin Resistant Enterococci (VRE) and High Level Aminoglycoside Resistant Enterococci (HLARE) from clinical samples.

# PRODUCT SUMMARY AND EXPLANATION

Enterococci usually occur as the normal flora of the intestines of mammal. The presence of enterococci is an indication of faecal contamination. The increasing development of multiple resistance towards antibiotics particularly vancomycin by enterococci is a serious threat to the world. 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 resistanct 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.

#### **COMPOSITION**

Ingredients	Gms / Ltr	
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	

# **PRINCIPLE**

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 added to the medium helps to suppress the contaminating flora especially gramnegative bacteria.

## **INSTRUCTION FOR USE**

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

# **QUALITY CONTROL SPECIFICATIONS**

Appearance of Powder: Cream to yellow homogeneous free flowing powder.Appearance of prepared medium: Light yellow coloured clear solution without any precipitate.

**pH (at 25°C)** : 7.4±0.2

# **INTERPRETATION**

Cultural characteristics observed with added Meropenem supplement, after an incubation.









Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	>=10 <sup>3</sup>	Inhibited	35 - 37°C	18-24 Hours
Escherichia coli	25922	>=10 <sup>3</sup>	Inhibited	35 - 37°C	18-24 Hours
Salmonella Typhimurium	14028	>=10 <sup>3</sup>	Inhibited	35 - 37°C	18-24 Hours
Pseudomonas aeruginosa	27853	>=10 <sup>3</sup>	Inhibited	35 - 37°C	18-24 Hours
Enterococcus faecalis	51299	50-100	Good-luxuriant	35 - 37°C	18-24 Hours

## **PACKAGING:**

In pack size of 100 gm and 500 gm bottles.

# **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

## **REFERENCES**

- 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.



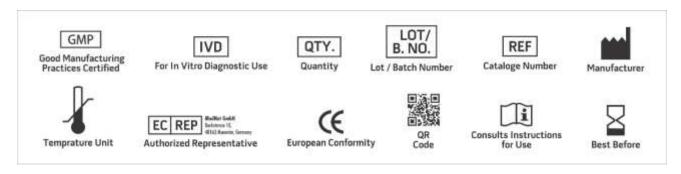












**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019







