

79599 VRE ChromoSelect Agar Base

VRE ChromoSelect Agar Base is recommended for identification of Vancomycin Resistant Enterococci from clinical specimens.

Composition:

Ingredients	Grams/Litre
Peptone special	25.0
Chromogenic mixture	0.45
Sodium chloride	5.0
Buffering agent	1.25
Salt mixture	4.25
Agar	15.0
Final pH (at 25 °C) 6.5 +/- 0.2	

Store prepared media below 4 °C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 4 °C.

Directions:

Suspend 50.95 grams in 1000 ml distilled water. Heat to boiling 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 the rehydrated contents of two vials of VRE ChromoSelect Agar Supplement (Cat. No. 55286). Mix well and pour into sterile Petri plates.

Principle and Interpretation:

Enterococci are the common habitants of the normal flora residing in the intestines of mammals (1). Vancomycin Resistant Enterococci are the group of Enterococci that have developed resistance towards many antibiotics particularly vancomycin. enterococcal infections that result in human disease can be fatal, particularly those caused by strains of vancomycin-resistant enterococci (VRE) (2). Early detection of VRE is important to prevent the emergence of vancomycin resistant in *Enterococcus faecalis*.

VRE can be transmitted from person to person, especially in a hospital or chronic-care facility. Microscopic amounts of fecal material from an infected or colonized patient can contaminate the hospital environment and be a reason for the spread of infection. There are many traditional media for the detection of VRE which includes Vancomycin Resistant Enterococci Broth Base/ Agar or Bile Esculin Agar supplemented with vancomycin

Peptones in the medium supplies the necessary nutrients and vitamins required for the growth of microorganisms. Sodium chloride maintains the osmotic balance. Buffering agents provides buffering to the medium. *Enterococcus faecalis* cleaves the chromogenic substrate in the medium to produce blue colored colonies, which are clearly visible against the opaque background. The supplement added to the medium allows the selective isolation of Vancomycin Resistant Enterococci. This medium can be inoculated directly from screening swab, isolated colony prepared as a liquid suspension approximately equivalent to 0.5 McFarland turbidity.

Cultural characteristics after 24-48 hours at 37°C.

Organisms (ATCC)	Recovery	Color of medium
<i>Enterococcus faecalis</i> (51299)	+++	bluish green
<i>Enterococcus faecalis</i> (29212)	-	-
<i>Staphylococcus aureus</i> (25923)	-	-



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

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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