

Vancomycin Resistant Enterococci (VRE) Detection Chrom Agar Plate (M1120)

Recommended as a selective media for isolation of Vancomycin Resistant Enterococci (VRE).

Composition

Ingredients	g/ L
Peptone mixture -----	25.000
Chromogenic mixture -----	0.450
Sodium chloride -----	5.000
Buffering agent -----	1.250
Salt mixture -----	4.250
Agar -----	15.000

Description

Enterococci are the common habitants of the normal flora residing in the intestines of mammals. 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). 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.

Enterococcus faecalis cleaves the chromogenic substrate in the medium to produce blue coloured colonies, which are clearly visible against the opaque background.

This medium can be inoculated directly from screening swab, isolated colony prepared as a liquid suspension approximately equivalent to 0.5 McFarland turbidity.

Specimen Collection and Handling

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

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Follow good microbiological lab practices while handling specimens and culture.

Limitations

1. Some intermediate species may show poor growth due to nutritional variations and tolerance to vancomycin.
2. Slight colour variation may be observed depending upon the utilization of the substrate by the organism.
3. Interspecies differentiation between *Enterococcus faecalis* and *Enterococcus faecium* cannot be confirmed.
4. Further confirmation has to be carried using sensitivity testing.
5. The surface of the medium should be dry when inoculated.

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**Physical/Chemical control**

Color : Cream to yellow pH: 6.30-6.70

Cultural Response

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

Microbiological activity

Organisms	Inoculum CFU/ml	Growth
Enterococcus faecalis (VRE) ATCC 51299	50-100	Good growth, bluish green colonies
Enterococcus faecalis ATCC 29212	$\geq 10^4$	inhibited
Staphylococcus aureus ATCC 25923	$\geq 10^4$	inhibited

Storage and Shelf Life

Store between 2-8°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 sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Mascini EM, Bonten MJ: Vancomycin- resistant enterococci: consequences for therapy and infection control. Clin Microbiol Infect.2005,11 (Suppl.4) :43-56
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.