CHROMOGENIC AGAR FOR VANCOMYCIN-RESISTANT ENTEROCOCCUS (VRE)

CAT Nº: 2077

For the detection of vancomycin-resistant enterococci

FORMULA IN g/l

Growth Factors	41.00	Vancomycin	5 mg
Sodium Chloride	15.00	Bacteriological Agar	15.00
Chromogenic Substrate and Inhibitors	0.477		

Final pH 7.1 ± 0.2 at 25ºC

PREPARATION

Suspend 71.5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until completely dissolved. AVOID OVERHEATING. DO NOT AUTOCLAVE. Cool to 45-50ºC, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

CHROMOGENIC AGAR VANCOMYCIN-RESISTANT ENTEROCOCCOS (VRE) is used to detect vancomycin-resistant enterococci.

The medium contains the necessary nutrients for the development of vancomycin-resistant enterococcus. The chromogenic substrate produces colonies which are greenish-blue in color and the inhibitors in the medium prevent the growth of accompanying flora. Vancomycin inhibits all enterococcus faecalis susceptible to it.

Enterococci are bacteria found in the human digestive and female genital tracts, although they do not pose a threat to healthy people. Infections occur more commonly in people who are hospitalized and who may be more susceptible to infection. Health professionals use vancomycin as an antibiotic to treat infections but, upon exposure to it, some bacteria will develop vancomycin-resistance. Enterococci are particularly interesting because, as with many of their bacterial counterparts, they can resist different forms of antibiotic treatment, including vancomycin, usually the last resort for resistant infections.

Inoculate on the surface and incubate at 35 ± 2°C for 18-24 hours.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures, after incubation at a temperature of 35 ± 2°C and observed alter 18-24 hours.

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Microorganisms	Development	Colony Color
Enterococcus faecium ATCC 19434	Inhibited	
Enterococcus faecalis ATCC 29212	Inhibited	
Enterococcus faecalis ATCC 19433	Inhibited	
Enterococcus faecalis ATCC 33186	Inhibited	
Enterococcus faecalis ATCC 51299	Good	Greenish-blue
Escherichia coli ATCC 25922	Inhibited	
Enterobacter aerogenes ATCC 13048	Inhibited	
Staphylococcus aureus ATCC 25923	Inhibited	
Salmonella typhimurium ATCC 14028	Inhibited	

BIBLIOGRAPHY

Levin, Fischer and Cabelli. 1975. Appl. Microbiol. *30.66.*
U.S. Environmental Protection Agency. 2002. Method 1600: Enterococci in water by membrane filtration using membrane enterococcus indoxyl –D- glucoside agar (mEI]. Publication EPA-821- R-02-022. USEPA Office of Water, Office of Science and Technology, USEPA, Washington, DC.
NIH. National Institute of Allergy and Infectious Diseases

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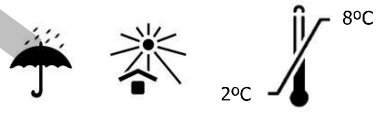
STORAGE

Once opened keep powdered medium sealed to avoid hydration.



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