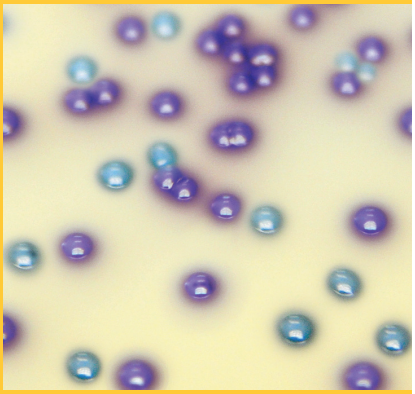
OXOID

Culture Media

Brilliance™ VRE



***Brilliance*™ VRE Agar is a chromogenic screening plate for the detection of Vancomycin Resistant Enterococci (VRE). The medium provides presumptive identification of *Enterococcus faecium* and *Enterococcus faecalis*, direct from clinical samples.**

SAVES TIME

- Presumptive identification of vancomycin resistant *E. faecium* and *E. faecalis* in 24 hours, direct from sample

CONVENIENT AND EASY TO USE

- Quick and easy screening test, ready-to-use plates with a new semi-opaque background
- Clear differentiation of *E. faecium* and *E. faecalis* colonies
- Direct inoculation from faecal sample, swab, isolate or suspension

SELECTIVE

- Inhibition of intrinsically resistant *E. casseliflavus* and *E. gallinarum*, reduces incidence of false-positive results compared to traditional media, minimising confirmatory testing

REDUCES COST

- Early presumptive identification of *E. faecium* and *E. faecalis* allows appropriate treatment and infection control procedures to be adopted earlier, improving treatment outcomes and the effectiveness of infection control measures

Oxoid *Brilliance* VRE Agar

Differentiation of vancomycin resistant *E. faecium* from *E. faecalis* is achieved through the inclusion of two chromogens that are targeted by specific enzymes: phosphatase and α-galactosidase. The action of these enzymes on the chromogens results in a build-up of colour within the colony. The colour produced depends on which enzymes the organisms possess. The presence of phosphatase enzymes in both *E. faecium* and *E. faecalis* results in a light blue colony, however, *E. faecium* also produces α-galactosidase, resulting in a mix of blue and pink chromophores within the bacterium producing indigo to purple colonies, which are easily distinguished from the light blue *E. faecalis* colonies.

Additional antibiotics, in combination with vancomycin, are present to suppress the growth of competing flora including *E. gallinarum* and *E. casseliflavus*, both of which are intrinsically resistant to vancomycin, possessing the chromosomally encoded VanC resistance mechanism.

The VanC resistance mechanism is not readily transmissible between organisms and as such is deemed less clinically significant than VanA and VanB mechanisms which are encoded on freely transmissible genetic elements, plasmids and transposons, thus increasing the risk of resistance genes spreading to other organisms.

Performance

Vancomycin Resistant Enterococci (VRE) have recently emerged as nosocomial pathogens, due to the increased use of vancomycin for treatment of meticillin-resistant *Staphylococcus aureus* in the United States of America and use of a vancomycin-like glycopeptide (avoparcin) as a growth promoter in animal husbandry in Europe[1].

In the U.S.A., the Centers for Disease Control and Prevention reported that as many as 1 in 3 infections amongst intensive care patients were caused by VRE[2]. Early detection of VRE is important for infection control and prevention measures, epidemiological infectious disease follow-up, and also prevention of vancomycin resistant *Staphylococcus aureus* emergence[3].

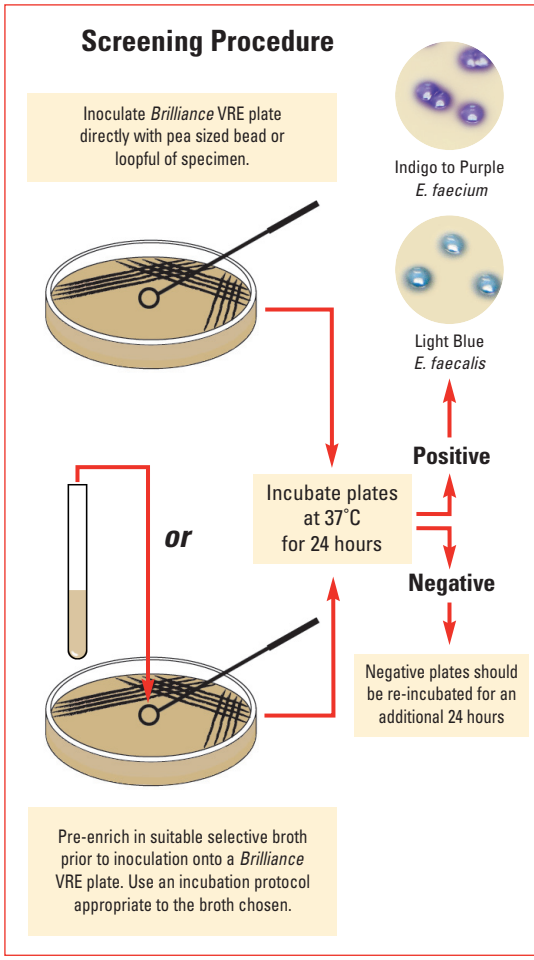
Oxoid *Brilliance* VRE Agar was evaluated at a clinical trial site, using a panel of 120 well-characterised, stored clinical isolates. *Brilliance* VRE Agar gave a sensitivity of 94.7% and 100% at 24 and 48 hours respectively, with the trial site reporting that it was able to detect more positives at 24 hours than with the competitor chromogenic agar currently in use[4].

In a separate internal evaluation, using a panel of 79 non VRE strains, *Brilliance* VRE Agar was 100% selective compared to a competitor media, which achieved selectivity of 94%.

Oxoid *Brilliance* VRE Agar is for *in vitro* diagnostic use only, by trained microbiologists. It must not be used beyond its stated expiry date, or if the product shows any signs of deterioration. Identifications are presumptive and should be confirmed.

References: 1. Bell J.M., Paton J.C., Turnidge J. (1998). Emergence of Vancomycin Resistant Enterococci in Australia: Phenotypic and Genotypic Characteristic of Isolates. *J. Clin. Microbiol.* **36**, 2187-2190. 2. Centers for Disease Control and Prevention (2006). Recommendations for Preventing the Spread of Vancomycin Resistance: HICPAC. 3 Delmas J., Robin F., Schweitzer C., Lesens O., Bonnet R. (2007). Evaluation of a new chromogenic medium, chromID VRE, for detection of Vancomycin Resistant Enterococci in stool samples and rectal swabs. *J. Clin. Microbiol.* **45**, 2731-2733. 4. Data on file at Oxoid, based on growth or inhibition.

Screening Procedure



Oxoid *Brilliance* Agar Ready-Poured Plates	SIZE/FORMAT	ORDER CODE
***Brilliance* VRE Agar**	10 x 90mm plates	PO1175A
Other Products in the *Brilliance* Resistance Screening Range		
***Brilliance* MRSA Agar**	10 x 90mm plates	PO1162A
***Brilliance* ESBL Agar**	10 x 90mm plates	PO5302A

The Oxoid product range offers the complete solution for all your VRE screening and testing needs.

Culti-Loops™		
Positive Control Strain		
***Enterococcus faecalis* (Vancomycin Resistant) ATCC® 51299™†**		CL1996
Negative Control Strains		
***Enterococcus faecium* ATCC® 35667™†**		CL1956
***Enterococcus faecalis* ATCC® 19433™†**		CL1990
***Enterococcus gallinarum* ATCC® 700425™†**		R4601958
Confirmatory Tests		
RapID™ STR	20 test panels	R8311003
Rapid identification of streptococci and enterococci		
Streptococcus Grouping Kit	50 tests	DR0585A
O.B.I.S. PYR	60 tests	ID0580M
Antimicrobial Susceptibility Testing		
M.I.C.Evaluator™ Strips		
Vancomycin 256 - 0.015µg/ml	10 strips	MA0102D
Vancomycin 256 - 0.015µg/ml	50 strips	MA0102F

For the accurate determination of the minimum inhibitory concentration (MIC) of a test organism to an antimicrobial

Discs		
Vancomycin 5µg Discs	5 x 50 discs	CT0188B
Vancomycin 30µg Discs	5 x 50 discs	CT0058B

Antimicrobial susceptibility testing discs for use with appropriate AST media in accordance with CLSI M44-A.

For more information about these and other products in the Oxoid *Brilliance* range of chromogenic media please visit www.oxoid.com

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