



# Brilliance CRE

Simple, swift CRE screening



*Brilliance* CRE Agar for simple screening of carbapenem-resistant Enterobacteriaceae, including NDM-1

#### **SAVES TIME**

- Results in just 18 hours, helping minimize the opportunity for transmission

#### **REDUCES COSTS**

- Identify CRE colonized patients earlier, for more targeted treatment and better patient outcomes

#### **EASY TO READ**

- Clearly differentiated CRE colonies
- The novel pigmented background makes it easy to spot other (non-CRE) resistant organisms, like *Acinetobacter*

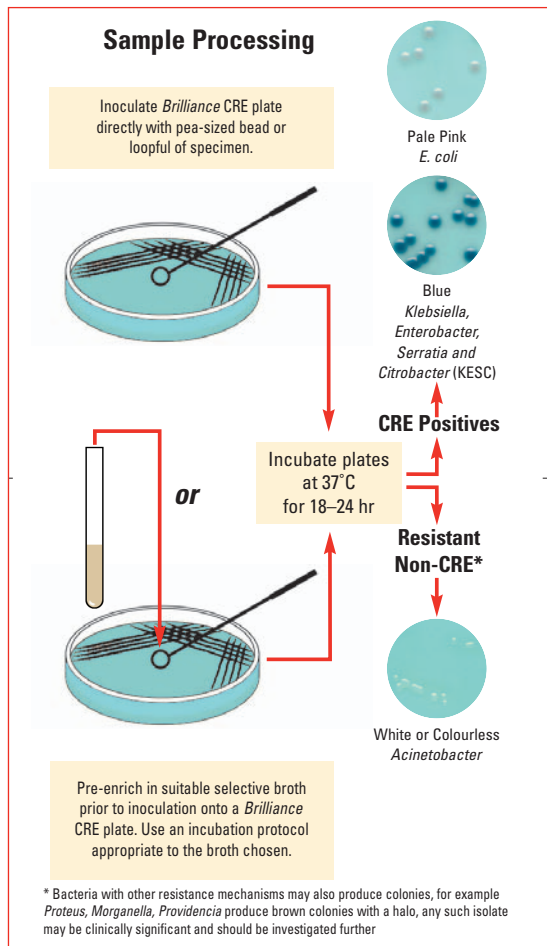
#### **CONVENIENT AND EASY TO USE**

- Direct inoculation from patient sample; swab, stool or urine
- Much simpler to perform and interpret than Modified Hodge Test

## Oxoid *Brilliance* CRE Agar

*Brilliance* CRE Agar makes detecting patients colonized with carbapenem-resistant Enterobacteriaceae (CRE) easy, reducing the need to perform complex confirmational methods, such as Modified Hodge Test. The formulation contains a modified carbapenem at a level recommended by both EUCAST and CLSI, ensuring reliable results with a wide variety of CRE, including those with the New Delhi Metallo  $\beta$ -lactamase 1 (NDM-1) mechanism.

The two-chromogen system differentiates *E. coli* (pink) from the *Klebsiella*, *Enterobacter*, *Serratia* and *Citrobacter* (KESC) group, which grow blue. The novel background makes the white or naturally pigmented colonies of non-CRE organisms, such as *Acinetobacter*, easy to spot, and results are available in just 18 hours.



## Performance

Carbapenems (imipenem, meropenem, ertapenem and doripenem) are invaluable for the treatment of infections due to multiresistant, Gram-negative bacteria, including producers of extended-spectrum  $\beta$ -lactamases (ESBL)<sup>1</sup>. However, the rapid emergence and dissemination of Enterobacteriaceae that are resistant to carbapenems poses a considerable threat to clinical patient care and public health<sup>2</sup>. Early detection of carbapenem-resistant Enterobacteriaceae (CRE) will allow faster implementation of appropriate strategies to limit the spread of these pathogens.

*Brilliance* CRE Agar was evaluated, alongside MacConkey Agar with 1  $\mu$ g/mL imipenem<sup>3</sup> and a competitor agar "K", for the detection of CRE (according to European Committee on Antimicrobial Susceptibility Testing (EUCAST) guidelines<sup>4</sup>), using a panel of geographically diverse isolates. The panel comprised 43 CRE, seven other carbapenem-resistant organisms, including *Acinetobacter* spp. and *Pseudomonas* spp., and 99 carbapenem-sensitive organisms.

	<i>Brilliance</i> CRE Agar	MacConkey Agar + 1 $\mu$ g/mL imipenem	Competitor "K" Agar
<b>Inclusivity at 16–18 hours</b>	97.7%	74.4%	88.4%

*Brilliance* CRE Agar detected more CRE than the competitor Agar or MacConkey Agar with 1  $\mu$ g/mL imipenem, making it an effective tool for detecting CRE and other carbapenem-resistant organisms in just 18 hours. Faster results enable prompt initiation of appropriate infection control measures to help minimize opportunities for further transmission of CRE.

Identifications are presumptive and should be confirmed.

### References

- Advice on carbapenemase producers: recognition, infection control and treatment. Department of Health Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) and Health Protection Agency. 28 January 2011.
- Cohen Stuart, J., Leverstein-Van Hall, M. A., on behalf of members of the Dutch Working Party on the Detection of Highly Resistant Microorganisms. (2010). Guideline for phenotypic screening and confirmation of carbapenemases in Enterobacteriaceae. International Journal of Antimicrobial Agents 36, 205–210.
- Schechner, V., Straus-Robinson, K., Schwartz, D., et al. (2009). Evaluation of PCR Based Testing for Surveillance of KPC-Producing Carbapenem-Resistant Members of the Enterobacteriaceae Family. Journal of Clinical Microbiology. 47(10)p.3261–3265
- European Committee on Antimicrobial Susceptibility Testing (EUCAST) Clinical breakpoints v 1.3 (2011/01/05)http://www.euca.org/clinical\_breakpoints/

### *Brilliance* Agar

	SIZE/FORMAT	ORDER CODE
<b>NEW <i>Brilliance</i> CRE Agar</b>	10x90mm plates	PO1226A
For simple screening of carbapenem-resistant Enterobacteriaceae, including NDM-1		
<b><i>Brilliance</i> ESBL Agar</b>	10x90mm plates	PO5302A
Easy identification of ESBL <i>E. coli</i> and other Enterobacteriaceae		
<b><i>Brilliance</i> MRSA 2 Agar</b>	10x90mm plates	PO1210A
Rapid, reliable MRSA screening in just 18 hours		
<b><i>Brilliance</i> VRE Agar</b>	10x90mm plates	PO1175A
Sensitive and selective screening of vancomycin-resistant enterococci		

### M.I.C. Evaluators™

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

Imipenem (IPM) 32–0.002 $\mu$ g/mL	10 test strips	MA0115D
Imipenem (IPM) 32–0.002 $\mu$ g/mL	50 test strips	MA0115F
Meropenem (MEM) 32–0.002 $\mu$ g/mL	10 test strips	MA0121D
Meropenem (MEM) 32–0.002 $\mu$ g/mL	50 test strips	MA0121F
Tigecycline (TGC) 256–0.015 $\mu$ g/mL	10 test strips	MA0124D
Tigecycline (TGC) 256–0.015 $\mu$ g/mL	50 test strips	MA0124F

### Antimicrobial Susceptibility Testing Discs

Colistin (CT) 10 $\mu$ g	5x50 discs	CT0017B
Colistin (CT) 25 $\mu$ g	5x50 discs	CT0065B
Doripenem (DOR) 10 $\mu$ g	5x50 discs	CT1880B
Ertapenem (ETP) 10 $\mu$ g	5x50 discs	CT1761B
Fosfomycin (FOS) 50 $\mu$ g	5x50 discs	CT0183B
Imipenem (IMP) 10 $\mu$ g	5x50 discs	CT0455B
Meropenem (MEM) 10 $\mu$ g	5x50 discs	CT0774B
Tigecycline (TGC) 15 $\mu$ g	5x50 discs	CT1841B

For more information about the Oxoid *Brilliance* range of chromogenic media and other products, please visit [www.oxoid.com](http://www.oxoid.com) or talk to your local Oxoid representative

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