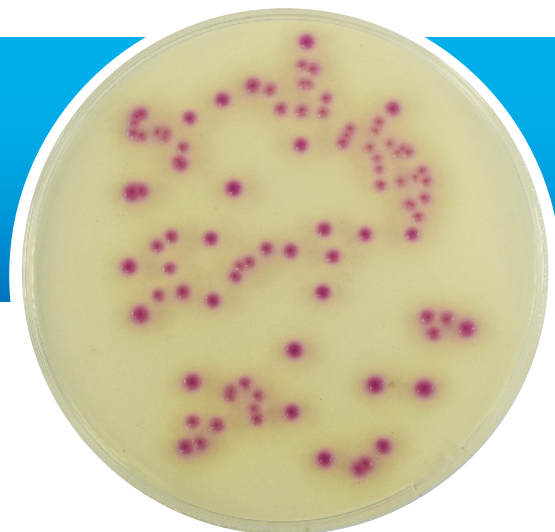


PP3053 COLOREX™ C3GR



β -Lactamase production (ESBL, AmpC, etc.) is the most common mechanism of β -lactam drug resistance in Gram-negative bacteria. Many clinical laboratories currently screen for ESBLs but do not screen for AmpC β -lactamases; though bacteria, mostly *Klebsiella pneumoniae*, *E.coli*, *Enterobacter* spp. and *Proteus* spp., producing plasmid-mediated AmpC β -lactamases have been responsible for nosocomial outbreaks.

Therefore, it is crucial to ensure that proper surveillance is in place to help establish appropriate guidelines and policies for infection control. Rapid detection of bacteria producing these enzymes also allows for de-escalation to more targeted therapy, to conserve carbapenem antibiotics for more serious infections.

Colorex™ Cephalosporin 3rd Generation Resistant (C3GR) is a chromogenic screening medium for the detection of β -Lactamase producing Gram-negative bacteria in clinical specimens. The selectivity of the medium allows for detection of ESBL and/or AmpC producing isolates that exhibit a reduced susceptibility to 3rd generation cephalosporin antibiotics. The chromogenic reactions allow for species differentiation on presumptive positive isolates.

C3GR *E.coli* – Red colonies

C3GR *Klebsiella* / *Enterobacter* / *Citrobacter* – Metallic blue colonies

C3GR *Proteus* – Colonies with brown halo

Other C3GR Gram –ve bacterial species (*Pseudomonas* / *Acinetobacter*) – Colourless colonies

C3G Sensitive Gram –ve bacterial species - Inhibited

Gram +ve bacterial species - Inhibited

Yeasts - Inhibited

Formula	gm/L	Properties	
Peptone & Yeast Extract	17.0	Appearance	Firm Gel
Agar	15.0	Colour	Pale Straw
Chromogenic Mix	1.0	pH	7.0 \pm 0.2
Selective Mix	0.37	Storage	2-8°C
		Shelf Life	42 days

Quality Control Test Organisms	Ref. No.	Result
<i>Escherichia coli</i>	NCTC 13341	Red Colonies
<i>Enterobacter cloacae</i>	NCTC 13406	Metallic Blue Colonies
<i>Escherichia coli</i>	NCTC 12241	Inhibited
<i>Klebsiella pneumoniae</i>	NCTC 9633	Inhibited
<i>Enterococcus faecalis</i>	NCTC 12697	Inhibited

Recommended Incubation: Aerobically at 37°C \pm 1°C for 18 - 24 hours