

# Fast detection of ESBL-producing organisms

Prevention saves lives, saves time, saves money



## Thermo Scientific™ Spectra™ ESBL Medium

An innovative must-have for HAI surveillance programs, Spectra ESBL is a selective and differential growth medium for use in primary isolation and presumptive identification of extended-spectrum beta-lactamase (ESBL)-producing organisms.

### Dynamic infection prevention & control

- Faster screening facilitates earlier intervention
- More cost-effective than screening with antimicrobial susceptibility testing (AST) methods

### Streamlined workflow for targeted, active surveillance

- Screen positive within 18 to 24 hours directly from perirectal swabs or fresh stool specimen
- Easier interpretation and less screening work up compared to traditional methods
- No special handling required, not light sensitive

### Performance

- More than one thousand rectal swabs or fecal samples from three hospitals throughout the US were evaluated on Spectra ESBL, with the following results:

Reported clinical performance 24 hours	
Sensitivity	Specificity
98%	89%

### Superior sensitivity & specificity

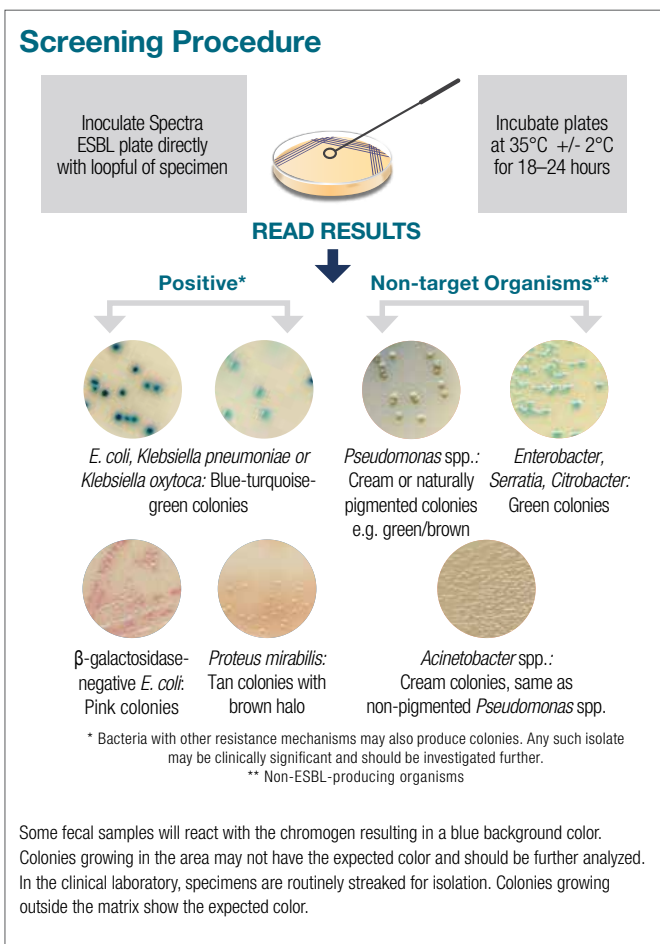
- High sensitivity for effective infection prevention and control programs
- High specificity reduces costs incurred due to unnecessary isolation or additional testing

The Centers for Disease Control and Prevention (CDC) classifies ESBL-producing organisms as a serious threat that requires prompt and sustained action. Nineteen percent of healthcare-associated *Enterobacteriaceae* infections are caused by ESBL-producing organisms<sup>1</sup>, and colonization rates with ESBL-producing *Enterobacteriaceae* are increasing<sup>2</sup>.

The treatment of choice for ESBL-producing organisms are carbapenems, which makes intervention before infection even more critical, as increased use of carbapenems can lead to carbapenem-resistant organisms, which are resistant to all or nearly all available antibiotics<sup>3,1</sup>.

# Stopping the spread of ESBL-producing organisms requires an effective infection prevention program

Thermo Fisher Scientific offers a full range of ESBL screening and testing solutions including the Thermo Scientific™ Sensititre™ System for susceptibility testing. Our expertise is backed by stringent quality assurance, reliable service, on-time delivery and superior customer support.



## Spectra Ready-Poured Plates

### Ordering Information

Description	Packaging	Ref
Spectra™ ESBL	10 plates/Pk	R01810
	100 plates/Pk	R01811

## Additional Products

### Ordering Information

Description	Packaging	Ref
Thermo Scientific™ Culti-Loops™ Klebsiella pneumoniae ATCC® 700603†	5 loops/Pk	R4603074
Culti-Loops Escherichia coli ATCC® 25922†	5 loops/Pk	R4607050
Culti-Loops Echerichia coli ATCC® BAA-201	5 loops/Pk	R4609482
Culti-Loops P. mirabilis 511-116	5 loops/Pk	R4608088
Saline 0.85% (1mL)	20/Pk	R064432
Oxoid™ Cefpodoxime Antimicrobial Susceptibility Disks	50X5 cart./Pk	CT1612B
Oxoid Ceftazidime Antimicrobial Susceptibility Disks	50X5 cart./Pk	CT0412B
Mueller Hinton Agar (15X150mm)	10/Pk	R04050
Thermo Scientific™ Sensititre™ Expanded Spectrum Beta-lactamase Plate	10/Pk	ESB1F

## References:

- http://www.cdc.gov/drugresistance/threat-report-2013/pdf/ar-threats-2013-508.pdf retrieved on March 10, 2014.
- Reddy, P., Malczynski, A., Obias, A., Reiner, S., Jin, N., Guang, J., et al. (2007). Screening for Extended-Spectrum Beta-Lactamase-Producing Enterobacteriaceae among High-Risk Patients and Rates of Subsequent Bacteremia. *Clinical Infectious Diseases*, 846-852.
- David L. Paterson and Robert A. Bonomo (2005). Extended-Spectrum-Lactamases: a Clinical Update, *Clin. Microbiol. Rev.* 18(4):657. DOI: 10.1128/CMR.18.4.657-686.

To learn more about the Thermo Scientific Spectra range of chromogenic media and the fight against the spread of deadly organisms, please visit [thermofisher.com/preparedmedia](http://thermofisher.com/preparedmedia)



©2017 Thermo Fisher Scientific Inc. All rights reserved. The ATCC Licensed Derivative® Emblem, the ATCC Licensed Derivative® word mark, and the ATCC catalog marks are trademarks of ATCC. Thermo Fisher Scientific Inc. is licensed to use these trademarks and to sell products derived from ATCC® cultures. All trademarks are property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

## Contact Information:

microbiology@thermofisher.com  
USA +800 255 6730

991-259  
May 2017

**ThermoFisher**  
SCIENTIFIC