

IVD solutions through partnership



# **MASTDISCS<sup>®</sup>** *Combi*

ESBL Detection Set (EUCAST)

**NEW**  
**EUCAST**  
Recommended

- New disc potencies recommended by EUCAST
- Free results calculator available to download
- 4 week stability in MAST<sup>®</sup> DISCMASTER dispenser

## Extended Spectrum $\beta$ lactamases

Extended spectrum beta-lactamases (ES $\beta$ LS) are bacterial enzymes which confer resistance to penicillin and extended spectrum cephalosporin antibiotics in members of the order Enterobacterales. Most ES $\beta$ LS are susceptible to cephamycins, and are susceptible to carbapenems although resistance can arise through porin loss.

The prevalence of ES $\beta$ L producing pathogens is continuing to increase worldwide, limiting the antibiotic treatment options posing challenges in antibiotic management. Disc diffusion using cephalosporin discs with and without clavulanic acid, are used for phenotypic confirmation of ES $\beta$ L production in Enterobacterales.

EUCAST recommends laboratories to introduce combination discs containing cefotaxime 5 $\mu$ g and ceftazidime 10 $\mu$ g with and without clavulanic acid 10 $\mu$ g for routine phenotypic confirmation of ES $\beta$ L production in Group 1 Enterobacterales<sup>1</sup>. ES $\beta$ L detection in Group 2 Enterobacterales is recommended using Cefepime 30 $\mu$ g with and without clavulanic acid 10 $\mu$ g discs (D63C).

## MASTDISCS® Combi ES $\beta$ L Detection Set (EUCAST)

MAST's range of ES $\beta$ L detection discs offers laboratories a simple, reliable and low cost means of identification and detection by using paired combination disc sets.

The **MASTDISCS® Combi** ES $\beta$ L Detection Set (EUCAST) contains two paired sets of cartridges each containing approximately 50 discs:

- 1 × Cefotaxime 5 $\mu$ g discs
- 1 × Ceftazidime 10 $\mu$ g discs
- 1 × Cefotaxime 5 $\mu$ g + Clavulanic acid 10 $\mu$ g discs
- 1 × Ceftazidime 10 $\mu$ g + Clavulanic acid 10 $\mu$ g discs

### ESBL Positive



### ESBL Negative



An increase in zone diameter of 5mm in the presence of clavulanic acid indicates the presence of ES $\beta$ L in the test organism.

## Ordering Information

Order Code	Product	No. Tests
D76C	<b>MASTDISCS® Combi</b> ES $\beta$ L Detection Set (EUCAST)	50
D63C	<b>MASTDISCS® Combi</b> Cefepime ES $\beta$ L ID Set	150

1. EUCAST technical guidance on the use of the combination disk test (CDT) for confirmation of ES $\beta$ L in Enterobacterales (Feb 2019)

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