

AmpC & ES β L DETECTION DISCS

Mast[®] - leaders in ES β L detection

A petri dish containing a bacterial culture with a central disc. The disc is white with a red question mark. The culture is yellowish and shows numerous small, yellowish colonies. The text 'AmpC' is overlaid in large blue letters at the top, and 'ESβL' is overlaid in large blue letters at the bottom.

AmpC
ES β L



- *Simple to test*
- *Easy to interpret*
- *Identify ES β L and AmpC resistance*
- *Reduces inappropriate treatment*

D68C AmpC & ESβL Detection Set

Interpretation of results

Interpret results by comparing inhibition zone diameters in the sequence described below:-

Compare the zone of inhibition of the Cefpodoxime disc (**A**) to the zones of inhibition of each of the Cefpodoxime plus inhibitor discs (**B, C, and D**) where

- A.** Cefpodoxime 10ug (CPD10) **B.** CPD10 + ESβL inhibitor
C. CPD10 + Amp C inhibitor **D.** CPD10 + ESβL and AmpC inhibitors

Step 1



If all zones are within 2mm of each other, record the organism as demonstrating neither ESβL nor AmpC activity.

Interpretation

Neither ESβL nor AmpC producer

Step 2



Subtract **A** from **B**, **C** from **D**,
B from **D** and **A** from **C**

If each of
B - A and **D - C** \geq 5mm

AND each of
D - B and **C - A** $<$ 5mm

Organism is demonstrating
ESβL activity alone.

Interpretation

ESβL alone

Step 3



Subtract **A** from **B**, **C** from **D**,
B from **D** and **A** from **C**

If each of
B - A and **D - C** $<$ 5mm

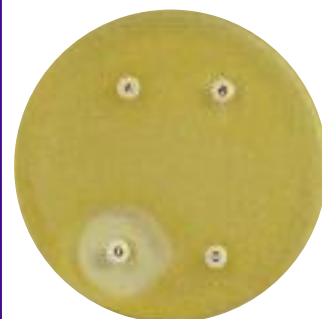
AND each of
D - B and **C - A** \geq 5mm

Organism is demonstrating
AmpC activity alone.

Interpretation

AmpC alone

Step 4



Subtract **C** from **D**
and **A** from **B**.

If **D - C** \geq 5mm
BUT **B - A** $<$ 5mm

Organism is demonstrating
ESβL and AmpC combined
activity.

Interpretation

ESβL & AmpC combined

Alternatively a calculation program is available at www.mastgrp.com

Mast Group Ltd.
Mast House
Derby Road, Bootle
Merseyside L20 1EA UK

Tel: (44) 0151 933 7277
Fax: (44) 0151 944 1332
e-mail: sales@mastgrp.com



Mast Diagnostica GmbH
Feldstrasse 20
D-23858 Reinfeld
Germany

Tel: (49) 04533 20070
Fax: (49) 04533 200768
e-mail: mast@mast-diagnostica.de



Mast Diagnostic
115 Rue Jules Barni
80000 Amiens
France

Tel: (33) 03 22 80 80 67
Fax: (33) 03 22 80 99 22
e-mail: jcbarral@mast-diagnostic.fr



Davies Diagnostics (Pty) Ltd.
PO Box 3222
Randburg 2125
Republic of South Africa

Tel: (27) 011 777 7600
Fax: (27) 011 787 6917
e-mail: mkt@daviesdiag.co.za

