

## Mast Uri<sup>®</sup> Plates: Antibiotic and Identification plates; current availability (subject to change)

### Antibiotic plates aligned with EUCAST Clinical Breakpoints

\*It is recommended that referral be made to the current EUCAST Clinical Breakpoint table for additional information and observations (Table v15.0 valid from 01.01.25). This is available for download from the EUCAST website. EUCAST can make additional changes to their breakpoint tables throughout the year if changes are necessary, so it is essential to check for additional updates to the breakpoint tables periodically.

Code	Plate Type	Notes*
MPM-AK8	Amikacin 8mg/L	<ul style="list-style-type: none"> <li>Breakpoint <i>Enterobacterales</i> &amp; <i>Acinetobacter</i> spp. from infections originating from the urinary tract</li> </ul>
MPM-A8	Amoxicillin 8mg/L <sup>1</sup>	<ul style="list-style-type: none"> <li>Resistant breakpoint for <i>Enterobacterales</i> originating from the urinary tract</li> <li>Breakpoint for <i>Enterobacterales</i> from uncomplicated UTI only</li> </ul>
MPM-AUG8	Amoxicillin-Clavulanate 8mg/L <sup>1</sup>	<ul style="list-style-type: none"> <li>Resistant breakpoint for <i>Enterobacterales</i> originating from the urinary tract</li> </ul>
MPM-AMC32	Amoxicillin-Clavulanate 32mg/L <sup>1</sup>	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> from uncomplicated UTI only</li> </ul>
MPM-AP8	Ampicillin 8mg/L <sup>1</sup>	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> from uncomplicated UTI only</li> </ul>
MPM-CFX16	Cefalexin 16mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> from uncomplicated UTI only</li> </ul>
MPM-CXM8	Cefuroxime 8mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>E. coli</i>, <i>Klebsiella</i> spp. (except <i>K. aerogenes</i>), &amp; <i>P. mirabilis</i> from uncomplicated UTI only</li> </ul>
MPM-CPD1	Cefpodoxime 1mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> from uncomplicated UTI only</li> </ul>
MPM-CIP0.25	Ciprofloxacin 0.25mg/L	<ul style="list-style-type: none"> <li>Susceptible breakpoint for <i>Enterobacterales</i> for indications other than meningitis</li> <li><u>Use both MPM-CIP0.25 &amp; MPM-CIP0.5 plates to report S, I, R.</u></li> </ul>
MPM-CIP0.5	Ciprofloxacin 0.5mg/L	<ul style="list-style-type: none"> <li>Resistant breakpoint for <i>Enterobacterales</i> indications other than meningitis &amp; <i>Pseudomonas</i> spp.</li> <li><u>Use both MPM-CIP0.25 &amp; MPM-CIP0.5 plates to report S, I, R.</u></li> </ul>
MPM-CRO1	Ceftriaxone 1mg/L	<ul style="list-style-type: none"> <li>Susceptible breakpoint for <i>Enterobacterales</i> for indications other than meningitis</li> </ul>

Code	Plate Type	Notes*
MPM-FOS8	Fosfomycin 8mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>E. coli</i> for infections originating from the urinary tract</li> </ul>
MPM-GM2	Gentamicin 2mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> for infections originating from the urinary tract</li> </ul>
MPM-MEC8	Mecillinam 8mg/L	<ul style="list-style-type: none"> <li>Breakpoint for most <i>Enterobacterales</i>, specifically <i>E. coli</i>, <i>Klebsiella</i> spp., <i>Enterobacter</i> spp., <i>Citrobacter</i> spp. &amp; <i>P. mirabilis</i>, from uncomplicated UTI only</li> </ul>
MPM-NI64	Nitrofurantoin 64mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>E. coli</i>, <i>Enterococcus</i> spp., <i>S. agalactiae</i> (group B streptococci) &amp; <i>S. saprophyticus</i> from uncomplicated UTI only</li> </ul>
MPM-PTZ8	Piperacillin-Tazobactam 8mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i></li> </ul>
MPM-TEM16	Temocillin 16mg/L	<ul style="list-style-type: none"> <li>Resistant breakpoint for most <i>Enterobacterales</i>, specifically <i>E. coli</i>, <i>Klebsiella</i> spp. (except <i>K. aerogenes</i>) &amp; <i>P. mirabilis</i></li> </ul>
MPM-TM4	Trimethoprim 4mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterobacterales</i> &amp; <i>Staphylococcus</i> spp. from uncomplicated UTI only</li> </ul>
MPM-TS2/38	Trimethoprim 2mg/L + Sulfamethoxazole 38mg/L	<ul style="list-style-type: none"> <li>Susceptible breakpoint for <i>Enterobacterales</i>, <i>Acinetobacter</i> spp., &amp; <i>Staphylococcus</i> spp.</li> <li>Resistant breakpoint for <i>Streptococcus pneumoniae</i>.</li> </ul>
MPM-VA4	Vancomycin 4mg/L	<ul style="list-style-type: none"> <li>Breakpoint for <i>Enterococcus</i> spp. &amp; Coagulase-negative staphylococci</li> </ul>

1 - For information on how to implement aminopenicillin breakpoints, see [www.eucast.org/eucastguidancedocuments/](http://www.eucast.org/eucastguidancedocuments/)

2- In *E. faecalis*, susceptibility to ampicillin, amoxicillin and piperacillin (with and without beta-lactamase inhibitor) is the expected phenotype, while in *E. faecium*, resistance is common

## Plates for Identification

### Identification Plate Set

Code	Description
MPM-CON	Control
MPM-CPOS	Chromogenic Gram-positive
MPM-CNEG	Chromogenic Gram-negative
MPM-CBGA	Chromogenic Beta Glucuronidase
MPM-IDM51	Aesculin
MPM-IDM52	Phenylpyruvic Acid
MPM-IDM62	Chromogenic Group B Strep

## Detection of Antimicrobial Activity

Code	Description
MPM-IDM54	Antimicrobial Activity Indicator (AAI) plate

## Plates for Antimicrobial Resistance Detection

Code	Description
MPM-CRE	Carbapenemase screening plate
MPM-CPD4	Detection of ESBL's. Eliminates bacteria lying on EUCAST breakpoint (1mg/L)

## Notes

Recent taxonomic studies have narrowed the definition of the Family *Enterobacteriaceae*. Some previous members of this family are now included in other families within the Order Enterobacterales. These breakpoints apply to all members of the Enterobacterales.

Direct culture and sensitivity testing of samples from patients on antibiotics may give misleading results due to inhibition of pathogens. To facilitate detection of antimicrobial activity in urine samples the Antimicrobial Activity Indicator plate (MPM-IDM54) may be included in the Plate Set if required.

**These plates are currently available with a four to six-week lead-time.**