



# MTS™ Technical Sheet *Nocardia* spp.

## Specimen

Respiratory (broncho-alveolar lavage, sputum, trans-tracheal aspirates), sterile sites (subcutaneous tissue, brain biopsy), wounds, CSF, blood and pus.

|                            |                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Medium</b>              | Mueller Hinton II Agar (5% Sheep Blood), ref. 10131 and 12032                                                                                                                                    |
| <b>Inoculum</b>            | Suspension in Mueller Hinton Broth (ref. 24107) to 1 McFarland (ref. 80401)                                                                                                                      |
| <b>Incubation</b>          | 35 ± 2°C / ambient temperature / 48-72 hours depending on the species                                                                                                                            |
| <b>Reading precautions</b> | Bactericidal drugs: interpret at complete inhibition of growth including microcolonies, hazes and isolated colonies.<br>Bacteriostatic drugs: interpret at 80% inhibition when trailing is seen. |

|            |                                                     | Quality Control<br>(M.I.C. µg/mL) |                               | INTERPRETATION<br>CLSI M.I.C. Criteria (µg/mL) |       |     | Example of<br>ANTIBIOGRAM<br>140 mm petri dish |
|------------|-----------------------------------------------------|-----------------------------------|-------------------------------|------------------------------------------------|-------|-----|------------------------------------------------|
|            |                                                     | <i>S. aureus</i><br>ATCC® 29213   | <i>E. coli</i><br>ATCC® 35218 | S                                              | I     | R   |                                                |
| <b>AK</b>  | AMIKACIN                                            | 1-4                               | -                             | ≤8                                             | -     | ≥16 | ✓                                              |
| <b>AUG</b> | AMOXICILLIN/CLAVULANIC<br>ACID 2/1 <sup>1</sup>     | -                                 | 4-16                          | ≤8                                             | 16    | ≥32 | ✓                                              |
| <b>FEP</b> | CEFEPIME                                            | 1-4                               | -                             | ≤8                                             | 16    | ≥32 |                                                |
| <b>CTX</b> | CEFOTAXIME                                          | 1-4                               | -                             | ≤8                                             | 16-32 | ≥64 |                                                |
| <b>CRO</b> | CEFTRIAZONE                                         | 1-8                               | -                             | ≤8                                             | 16-32 | ≥64 |                                                |
| <b>CIP</b> | CIPROFLOXACIN                                       | 0.12-0.5                          | -                             | ≤1                                             | 2     | ≥4  | ✓                                              |
| <b>CLR</b> | CLARITHROMYCIN                                      | 0.12-0.5                          | -                             | ≤2                                             | 4     | ≥8  |                                                |
| <b>DX</b>  | DOXYCYCLINE                                         | 0.12-0.5                          | -                             | ≤1                                             | 2-4   | ≥8  |                                                |
| <b>CN</b>  | GENTAMICIN                                          | 0.12-1                            | -                             | ≤4                                             | 8     | ≥16 |                                                |
| <b>IMI</b> | IMIPENEM                                            | 0.016-0.06                        | -                             | ≤4                                             | 8     | ≥16 | ✓                                              |
| <b>LNZ</b> | LINEZOLID                                           | 1-4                               | -                             | ≤8                                             | -     | -   |                                                |
| <b>MN</b>  | MINOCYCLINE                                         | 0.06-0.5                          | -                             | ≤1                                             | 2-4   | ≥8  | ✓                                              |
| <b>SMX</b> | SULFAMETHOXAZOLE                                    | -                                 | -                             | ≤32                                            | -     | ≥64 |                                                |
| <b>TOB</b> | TOBRAMYCIN                                          | 0.12-1                            | -                             | ≤4                                             | 8     | ≥16 |                                                |
| <b>SXT</b> | TRIMETHOPRIM/<br>SULFAMETHOXAZOLE 1/19 <sup>1</sup> | ≤0.5                              | -                             | ≤2                                             | -     | ≥4  | ✓                                              |

Susceptible (S), Intermediate (I), Resistant (R)

**Notes:** <sup>1</sup> Value on the M.I.C. scale refers to the first component of the combination.

**Disclaimer:** The table is intended for general guidance only and may not contain all the necessary information. Also reported interpretive criteria and QC MIC ranges might be out of date. Always current guidelines from CLSI and/or EUCAST should be consulted.

## References

- CLSI M100S (2018) Performance Standards for Antimicrobial Susceptibility Testing – 28<sup>th</sup> Edition.
- CLSI M07-A11 (2018) Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria That Grow Aerobically. 11<sup>th</sup> Edition.
- CLSI M24-A2 (2011) Susceptibility Testing of Mycobacteria, Nocardiae, and Other Aerobic Actinomycetes. Approved Standard - 2<sup>nd</sup> Edition.

## MTS™ (MIC Test Strip), International Patent

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