

**EURGen\_C26-19** is an **NDM-5** producing *Escherichia coli* strain from Denmark

**Sequence type:**

ST477 (Pasteur)

ST405 (Achtman)

**Resistance genes and genes mutations/insertions<sup>1</sup>:**

| Antimicrobial agent             | Resistance gene              | Reported gene with mutation or insertion and reported change                |
|---------------------------------|------------------------------|-----------------------------------------------------------------------------|
| Carbapenems                     | <i>bla</i> <sub>NDM-5</sub>  | Not detected                                                                |
| Third generation cephalosporins | <i>bla</i> <sub>CMY-42</sub> | Not detected                                                                |
| Other beta-lactams              | Not detected                 | <i>ftsI</i> insertion KYRI_I336I                                            |
| Colistin                        | Not detected                 | Not detected                                                                |
| Fluoroquinolones                | Not detected                 | <i>gyrA</i> _D87N, <i>gyrA</i> _S83L, <i>parC</i> _S80I, <i>parE</i> _S458A |
| Aminoglycosides                 | <i>aadA2</i>                 | Not detected                                                                |
| Tetracyclines                   | <i>tet</i> (A)               | Not detected                                                                |
| Trimethoprim                    | <i>dfrA12</i>                | Not detected                                                                |
| Sulphonamide                    | <i>sul1</i>                  | Not detected                                                                |
| Fosfomycin                      | Not detected                 | Not detected                                                                |

<sup>1</sup>Detected using AMRFinder 4.2.7 and ResFinder 4.7.2 (database 2.6.0)

**Phenotype:**

| Antimicrobial agent           | Reference MIC (mg/ml) | Reference inhibition zone (mm) <sup>2</sup> | Interpretation <sup>3</sup> |
|-------------------------------|-----------------------|---------------------------------------------|-----------------------------|
| Piperacillin-tazobactam       | >64                   | 6                                           | R                           |
| Cefiderocol                   | ND                    | 14-19                                       | R                           |
| Cefotaxime                    | >8                    | 6                                           | R                           |
| Ceftazidime                   | >16                   | 6                                           | R                           |
| Ceftazidime-avibactam         | >32                   | 6                                           | R                           |
| Ceftolozane-tazobactam        | >16                   | 6                                           | R                           |
| Ertapenem                     | >4                    | 6                                           | R                           |
| Imipenem                      | >8                    | 6-12                                        | R                           |
| Imipenem-relebactam           | >16                   | 8-13                                        | R                           |
| Meropenem                     | >16                   | 6                                           | R                           |
| Meropenem-vaborbactam         | >16                   | 6                                           | R                           |
| Aztreonam                     | >16                   | 6-10                                        | R                           |
| Aztreonam-avibactam           | 16                    | 17-19                                       | R                           |
| Ciprofloxacin                 | >4                    | 6                                           | R                           |
| Levofloxacin                  | >4                    | 6                                           | R                           |
| Amikacin                      | 2                     | 19-22                                       | S                           |
| Gentamicin                    | 0.5-2                 | 18-23                                       | S                           |
| Tobramycin                    | 0.5-1                 | 18-21                                       | S                           |
| Tigecycline                   | 0.5                   | 19-22                                       | S                           |
| Colistin                      | 0.25-0.5              | -                                           | S                           |
| Trimethoprim-sulfamethoxazole | >16                   | 6                                           | R                           |
| Fosfomycin                    | 0.5                   | 24-29                                       | S                           |

ND: not determined

<sup>2</sup>Using EUCAST disk diffusion methodology ([https://www.eucast.org/ast\\_of\\_bacteria/disk\\_diffusion\\_methodology](https://www.eucast.org/ast_of_bacteria/disk_diffusion_methodology))

<sup>3</sup>SIR-categorization according to The European Committee on Antimicrobial Susceptibility Testing. Breakpoint tables for interpretation of MICs and zone diameters. Version 16.1, 2026. <https://www.eucast.org>.