

Supplementary Table 1. Primer sequences used in this study.

| Primers | Primer sequences | Products (bp) | Genes |
|---------|--------------------------|---------------|---------------------------|
| NDM-F | GCAGCTTGTCGGCCATGCGGGC | 782 | <i>bla</i> _{NDM} |
| NDM-R | GGTCGCGAAGCTGAGCACCGCAT | | |
| IMP-F | GAAGGCGTTTATGTTCATAC | 587 | <i>bla</i> _{IMP} |
| IMP-R | GTACGTTTCAAGAGTGATGC | | |
| KPC-F | TGGAAACTCCCCTACCTCTT | 900 | <i>bla</i> _{KPC} |
| KPC-R | CCACACTGATGCGTTCGTAT | | |
| VIM-F | CGCGGTCGCCATCTTCACG | 389 | <i>bla</i> _{VIM} |
| VIM-R | TGCCCCGAGCCAGTACCGCCAATG | | |
| OXA-F | GGCAACCTCGTCGCCTTTA | 438 | <i>bla</i> _{OXA} |
| OXA-R | GCAAGTCGGCGTGTTTTCG | | |
| MCR-1-F | ATCAGCCAAACCTATCCCATCG | 564 | <i>mcr-1</i> |
| MCR-1-R | GCAGACGCACAGCAATGCCTAT | | |
| SHV-F | ATCGTGGAGTGATCGACATT | 1565 | <i>bla</i> _{SHV} |
| SHV-R | ATCGTGGAGTGATCGACATT | | |
| TEM-F | ATAAAATTCTTGAAGAC | 1075 | <i>bla</i> _{TEM} |
| TEM-R | TTACCAATGCTTAATCA | | |

Supplementary Table 2. Antimicrobial susceptibility testing (MICs, mg/L) of 81 *bla*_{NDM}-positive strains.

| Isolates | MEM | IPM | ATM | CAZ | CHL | CIP | CST | FOS | GEN | AMK | AMP | TET | TGC | CFX | CFZ | TZP | SXT |
|------------|-----|-----|------|-------|------|-------|------|-------|------|------|------|------|------|------|------|-------|------|
| EC-13-1 | 16 | 4 | 64 | >256 | 256 | 8 | ≤0.5 | 8 | 32 | 16 | >256 | 256 | 1 | >256 | >256 | >256 | >32 |
| ECL-13-2 | 64 | 32 | 64 | >128 | >128 | 16 | 2 | 32 | >128 | >128 | >256 | 16 | 1 | >256 | >256 | 512 | > 32 |
| ECL-13-4 | 32 | 32 | >128 | >128 | 32 | >32 | 1 | ≤1 | 1 | 16 | >256 | 16 | 4 | >256 | >256 | >1024 | > 32 |
| KP-13-7 | 8 | 32 | >128 | >128 | >256 | >32 | 2 | 16 | >128 | >128 | >256 | 64 | 8 | >256 | >256 | >1024 | > 32 |
| KP-13-8 | 8 | 64 | >128 | >128 | >256 | >32 | 0.5 | 16 | 128 | 4 | >256 | 32 | 2 | 32 | >256 | 1024 | > 32 |
| KP-13-11 | 8 | 64 | >128 | >128 | 64 | 0.5 | 32 | 16 | 1 | 8 | >256 | 32 | 2 | >256 | >256 | 1024 | > 32 |
| CR-13-12 | 16 | 64 | >128 | >128 | >256 | 1 | 8 | 16 | 256 | 2 | >256 | 64 | 1 | >256 | >256 | >1024 | > 32 |
| KP-13-14 | 16 | 64 | >128 | >128 | 8 | 8 | 1 | 16 | 32 | 2 | >256 | 64 | 1 | >256 | >256 | 1024 | > 32 |
| EC-13-22 | 16 | 32 | >128 | >128 | 8 | 32 | 2 | ≤1 | 128 | 2 | >256 | 64 | 0.5 | >256 | >256 | >1024 | > 32 |
| EC-13-30 | 32 | 32 | >128 | >128 | 256 | 16 | 1 | 512 | 128 | 4 | >256 | 4 | 0.25 | >256 | >256 | >1024 | > 32 |
| EC-13-31 | 16 | 32 | >64 | >128 | >128 | 16 | 0.5 | 512 | 128 | 4 | >256 | 64 | 1 | >256 | >256 | >512 | > 32 |
| EC-13-33 | 4 | 16 | >128 | >128 | 16 | 32 | 2 | ≤1 | 2 | >128 | >256 | 32 | 0.25 | >256 | >256 | 1024 | > 32 |
| CF-13-34 | 8 | 16 | >128 | >128 | 16 | 8 | 2 | ≤1 | 128 | 2 | >256 | >128 | 0.5 | >256 | >256 | 512 | > 32 |
| CR-13-36 | 4 | 64 | 128 | >128 | 8 | ≤0.12 | 2 | 4 | 1 | 1 | >256 | 8 | 1 | >256 | >256 | 512 | > 32 |
| ECL-13-37 | 32 | 64 | >128 | >128 | 16 | 32 | 1 | 32 | >256 | >128 | >256 | 64 | 1 | >256 | >256 | 1024 | > 32 |
| EC-13-49 | 16 | 8 | >128 | >128 | 16 | 32 | 1 | ≤1 | 128 | >128 | >256 | 4 | 0.5 | >256 | >256 | >1024 | > 32 |
| PM58 | 16 | 64 | >128 | >128 | >256 | 16 | >128 | >1024 | >256 | >128 | >256 | 128 | 8 | >256 | >256 | 32 | > 32 |
| KP-14-6 | 64 | 32 | 2 | ≤0.25 | 16 | ≤0.12 | 2 | 16 | 64 | 2 | >256 | 64 | 0.5 | >256 | >256 | >1024 | 0.5 |
| CF-14-50 | 8 | 16 | 128 | >128 | >256 | 16 | 0.5 | ≤1 | 64 | 1 | >256 | 8 | 1 | >256 | >256 | 1024 | > 32 |
| EC-14-54 | 64 | 64 | 64 | 64 | >64 | >64 | 2 | ≤1 | 64 | 8 | >256 | >64 | 2 | >256 | >256 | >1024 | > 32 |
| EC-14-55 | 32 | 32 | >64 | >32 | 4 | 16 | 0.5 | ≤1 | >32 | <2 | >256 | >32 | 0.5 | >256 | >256 | >1024 | >32 |
| ECL-14-56 | 8 | 32 | 128 | >128 | 256 | 32 | 2 | 4 | 64 | 2 | >256 | 8 | 1 | >256 | >256 | 512 | > 32 |
| ECL-14-58 | 16 | 32 | 128 | >128 | 16 | 2 | 4 | 32 | <0.5 | 2 | >256 | 16 | 4 | >256 | >256 | >1024 | > 32 |
| ECL-14-60 | 16 | 64 | 2 | >128 | 16 | 16 | 2 | 32 | >125 | >256 | >256 | 16 | 4 | >256 | >256 | 1024 | 1.5 |
| KA-14-61 | 16 | 16 | 32 | >128 | 8 | 0.25 | 1 | 4 | 64 | 2 | >256 | 16 | 0.5 | >256 | >256 | 1024 | > 32 |
| KO-14-71 | 32 | 32 | 64 | 128 | 4 | 0.5 | 1 | 256 | 128 | 4 | >256 | 32 | 1 | >256 | >256 | 512 | > 32 |
| KOR-14-72 | 32 | 0.5 | 32 | 8 | >256 | 8 | 1 | 16 | >256 | >256 | >256 | 32 | 0.5 | >256 | >256 | 1024 | > 32 |
| EC-14-2-9 | 64 | 64 | 64 | 64 | >64 | >64 | 2 | ≤1 | >128 | >64 | >256 | >64 | 0.25 | >256 | >256 | >1024 | > 32 |
| EC-14-2-77 | 64 | 64 | 128 | >128 | 4 | 16 | 1 | ≤1 | >128 | >128 | >256 | 32 | 1 | >256 | >256 | 1024 | > 32 |

| | | | | | | | | | | | | | | | | | |
|-------------|-----|-----|-------|------|------|-------|------|-------|------|------|------|------|--------|------|------|-------|-------|
| EC-14-2-92 | 16 | 64 | >64 | >128 | >128 | 8 | 1 | 1024 | >128 | >128 | >256 | 32 | 0.25 | >256 | >256 | >1024 | >32 |
| EC-14-2-94 | 16 | 32 | 64 | >128 | >128 | 8 | 2 | >1024 | 2 | 2 | >256 | 32 | ≤0.25 | >256 | >256 | >1024 | >32 |
| KP-14-2-131 | 4 | 32 | 32 | >128 | >256 | 0.5 | 4 | 16 | 128 | 2 | >256 | 4 | 1 | >256 | >256 | >1024 | >32 |
| EC-14-2-134 | 16 | 32 | >64 | >128 | 16 | 8 | 0.5 | 4 | >128 | >128 | >256 | 8 | ≤0.25 | >256 | >256 | >1024 | >32 |
| EC-15-3 | 64 | 128 | 128 | 128 | >256 | 64 | 1 | 1024 | >512 | >256 | >256 | 64 | 2 | >256 | >256 | >512 | >32 |
| EC-15-10 | 16 | 64 | 64 | >128 | 4 | ≤0.12 | ≤0.5 | 4 | 1 | 2 | >256 | 2 | ≤0.25 | >256 | >256 | >512 | >32 |
| CF-15-33 | 8 | 32 | 64 | >128 | 32 | 0.25 | 1 | ≤1 | 1 | 2 | >256 | 8 | 1 | >256 | >256 | >512 | <20 |
| EC-15-34 | 64 | 128 | 64 | >128 | >128 | 8 | ≤0.5 | >1024 | >128 | >128 | >256 | >128 | 0.5 | >256 | >256 | 1024 | >32 |
| KP-15-35 | 4 | 32 | 64 | >128 | 4 | 0.12 | 4 | 8 | 2 | 1 | >256 | 4 | 1 | >256 | >256 | >512 | >32 |
| CF-15-43 | 4 | 16 | 128 | >128 | 8 | 16 | 1 | ≤1 | 256 | 8 | >256 | 4 | 1 | >256 | >256 | >512 | >32 |
| CF-15-61 | 8 | 16 | 64 | >128 | >256 | 16 | 0.5 | ≤1 | 64 | 1 | >256 | 8 | 0.5 | >256 | >256 | 512 | >32 |
| EC-15-2-1 | 32 | 64 | 64 | 64 | >64 | >64 | 2 | 32 | >64 | 2 | >256 | 2 | ≤0.25 | >256 | >256 | >512 | ≤2 |
| EC-15-2-2 | 16 | 32 | 64 | 64 | >64 | >64 | 1 | ≤1 | >64 | 2 | >256 | 16 | ≤0.25 | >256 | >256 | >512 | >32 |
| EC-15-2-5 | 64 | 64 | 64 | 64 | 8 | >64 | 2 | 2 | >64 | >64 | >256 | 64 | ≤0.125 | >256 | >256 | >1024 | >32 |
| KP-15-2-6 | 32 | 32 | >128 | >128 | 32 | 64 | 4 | ≤1 | 1 | 8 | >256 | 32 | 2 | >256 | >256 | >512 | >32 |
| EC-15-2-14 | 64 | 64 | 64 | 64 | 8 | >64 | 2 | ≤1 | >64 | 8 | >256 | 32 | 0.25 | >256 | >256 | >1024 | >32 |
| SM-15-2-16 | 4 | 32 | 32 | 64 | 64 | 0.5 | >16 | 8 | 2 | 4 | >256 | 4 | 2 | >256 | >256 | 512 | 0.5 |
| EC-15-2-24 | 32 | 64 | 64 | 64 | >64 | >64 | 1 | ≤1 | >64 | 16 | >256 | 16 | ≤0.125 | >256 | >256 | >1024 | >32 |
| EC-15-2-26 | 64 | 128 | >64 | >64 | 8 | >64 | 2 | 512 | >64 | >64 | >256 | 1 | ≤0.125 | >256 | >256 | >1024 | 0.06 |
| CF-15-2-29 | 32 | 32 | >128 | >128 | >256 | >64 | 2 | ≤1 | 256 | 32 | >256 | 32 | 1 | >256 | >256 | >512 | >32 |
| EC-15-2-35 | 32 | 32 | >64 | >64 | >64 | >64 | 2 | ≤1 | >64 | 16 | >256 | 16 | ≤0.125 | >256 | >256 | >1024 | >32 |
| EC-15-2-47 | 32 | 64 | 64 | 64 | >64 | >64 | 2 | ≤1 | >64 | 16 | >256 | 8 | ≤0.125 | >256 | >256 | >1024 | >32 |
| Pr-15-2-50 | 16 | 16 | >1024 | >64 | 8 | 16 | - | 256 | - | >64 | - | - | - | >256 | - | >128 | >32 |
| EC-15-2-51 | 32 | 32 | 64 | 64 | >64 | >64 | 1 | ≤1 | >64 | 64 | >256 | 32 | ≤0.125 | >256 | >256 | >1024 | 0.032 |
| KP-15-2-52 | 64 | 64 | ≤0.25 | >64 | 4 | ≤0.12 | 4 | 8 | 4 | 4 | >256 | 4 | 0.25 | >256 | >256 | >1024 | 0.125 |
| EC-15-2-56 | 64 | 128 | >64 | >64 | 8 | >64 | 2 | 2 | 8 | 8 | >256 | 2 | ≤0.125 | >256 | >256 | >1024 | 0.094 |
| KP-15-2-62 | 64 | 64 | 1 | >64 | 32 | 2 | 2 | 256 | 4 | 4 | >256 | 4 | 0.25 | >256 | >256 | >1024 | >32 |
| EC-15-2-65 | 128 | 256 | 64 | 64 | 32 | 32 | 1 | 1024 | >64 | >64 | >256 | 4 | ≤0.125 | >256 | >256 | >1024 | >32 |
| CF-15-2-98 | 32 | 32 | 32 | 128 | 16 | 8 | 4 | 1024 | 32 | 16 | >256 | 32 | 1 | >256 | >256 | >512 | >32 |
| KP-15-2-113 | 4 | 16 | 128 | >128 | 4 | 16 | >16 | 512 | 128 | 16 | >256 | 4 | 2 | >256 | >256 | 512 | >32 |
| EC-15-2-132 | 32 | 8 | >128 | >128 | 32 | 8 | ≤0.5 | 512 | >64 | 64 | 4 | 16 | 0.5 | >256 | >256 | 16 | >32 |

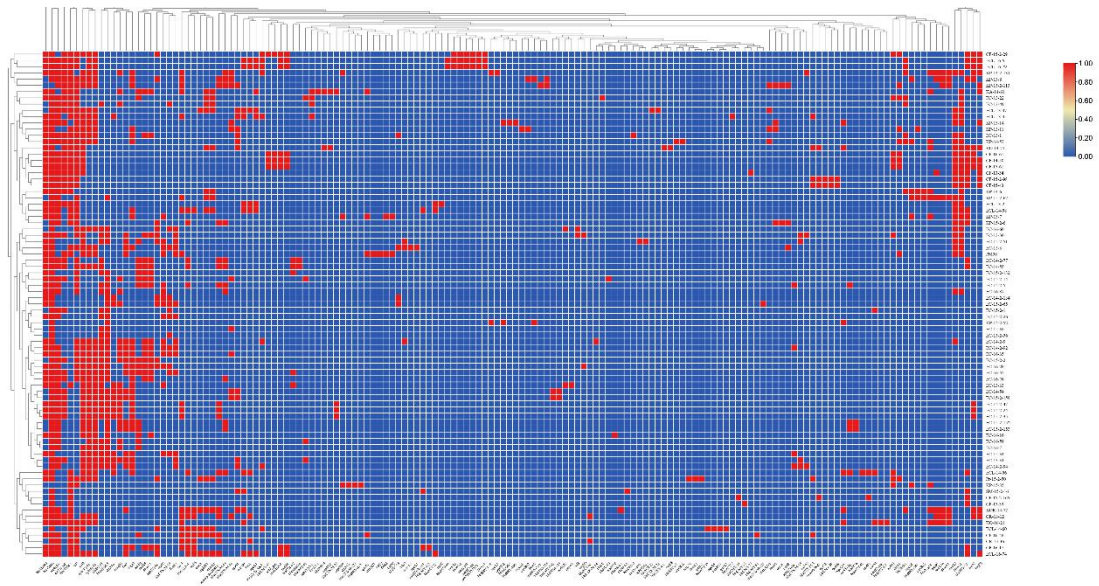
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|-------------|----|-----|-------|------|------|-----|------|-------|------|------|------|------|-----|------|------|------|------|
| EC-15-2-152 | 64 | 64 | 64 | 64 | >64 | >64 | 1 | ≤1 | >64 | 4 | >256 | 64 | | >256 | >256 | >512 | 0.38 |
| EC-15-2-153 | 16 | 64 | 64 | >128 | 256 | 2 | 2 | 16 | 512 | 8 | >256 | 16 | 8 | >256 | >256 | >512 | >32 |
| EC-15-2-159 | 64 | 512 | 64 | 64 | 16 | >64 | 2 | >1024 | >64 | >64 | >256 | 64 | | >256 | >256 | >512 | >32 |
| CF-15-2-165 | 2 | 8 | ≤0.25 | 8 | 32 | 32 | >64 | >1024 | 8 | 8 | >256 | 2 | 0.5 | >256 | >256 | >512 | ≤2 |
| ECL-16-5 | 16 | 16 | 64 | >64 | >128 | 1 | 2 | 16 | >128 | 16 | >256 | 128 | 2 | >256 | >256 | >512 | ≤2 |
| ECL-16-7 | 32 | 32 | >64 | >64 | >128 | >16 | >256 | 64 | >128 | >128 | >256 | 128 | 8 | >256 | >256 | >512 | >32 |
| EC-16-10 | 16 | 16 | 0.5 | >64 | 16 | >16 | ≤0.5 | 4 | 2 | 2 | >256 | 128 | 1 | >256 | >256 | >512 | >32 |
| CF-16-17 | 8 | 16 | 64 | >64 | >128 | >16 | 1 | ≤1 | 2 | 4 | >256 | 64 | 2 | >256 | >256 | >512 | >32 |
| EC-16-20 | 32 | 32 | >64 | >64 | 128 | >16 | ≤0.5 | 4 | >128 | >128 | >256 | 128 | 0.5 | >256 | >256 | >512 | >32 |
| KO-16-21 | 16 | 32 | 64 | >64 | 128 | >16 | 1 | 32 | 128 | 4 | >256 | 4 | 2 | >256 | >256 | >512 | >32 |
| EC-16-35 | 32 | 32 | >64 | >64 | >128 | >16 | 1 | >1024 | >128 | >128 | >256 | 64 | 2 | >256 | >256 | >512 | >32 |
| EC-16-37 | 16 | 16 | 64 | >64 | 16 | 16 | 1 | 4 | >128 | >128 | >256 | 8 | 0.5 | >256 | >256 | >512 | >32 |
| EC-16-52 | 32 | 32 | >64 | >64 | >128 | >16 | 1 | 1024 | 128 | 4 | >256 | 64 | 2 | >256 | >256 | >512 | >32 |
| KP-16-57 | 32 | 64 | 64 | >64 | 4 | >16 | 2 | 16 | 128 | 2 | >256 | 32 | 1 | >256 | >256 | >512 | >32 |
| CF-16-58 | 32 | 64 | >64 | >64 | 32 | >16 | 2 | ≤1 | >128 | 2 | >256 | >128 | 2 | >256 | >256 | >512 | ≤2 |
| EC-16-59 | 64 | 64 | >64 | >64 | 16 | >16 | 1 | ≤1 | 128 | 4 | >256 | >128 | 0.5 | >256 | >256 | >512 | ≤2 |
| EC-16-60 | 32 | 16 | >64 | >64 | 4 | >16 | 2 | >1024 | 2 | 4 | >256 | 2 | 0.5 | >256 | >256 | >512 | >32 |
| CF-16-61 | 8 | 16 | >64 | >64 | >128 | 16 | 2 | 1024 | 128 | 2 | >256 | 8 | 2 | >256 | >256 | >512 | >32 |
| EC-16-74 | 32 | 32 | >64 | 64 | 16 | >16 | ≤0.5 | 4 | 128 | 2 | >256 | 128 | 2 | >256 | >256 | >512 | ≤2 |
| ECL-16-76 | 32 | 64 | >64 | >64 | >128 | >16 | 2 | 32 | >128 | >128 | >256 | >128 | 4 | >256 | >256 | >512 | ≤2 |
| EC-16-79 | 64 | 128 | 32 | >64 | 8 | 16 | ≤0.5 | 8 | 128 | 4 | >256 | 32 | 1 | >256 | >256 | >512 | >32 |

Abbreviations: MEM, meropenem; IPM, imipenem; ATM, aztreonam; CAZ, ceftazidime; CHL, chloramphenicol; CIP, ciprofloxacin; CST, colistin; FOS, fosfomicin sodium; GEN, gentamicin; AMK, amikacin; AMP, ampicillin; TET, tetracycline; TGC, tigecycline; CFX, cefoxitin; CFZ, ceftazidime; TZP, Piperacillin–tazobactam; SXT, sulfamethoxazole/trimethoprim.

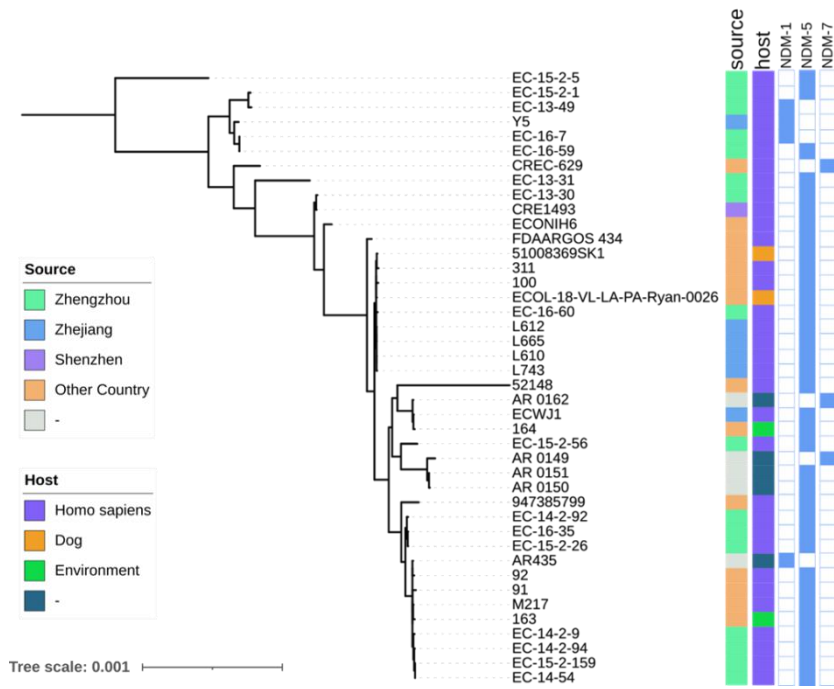
Supplementary Table 3. Basic information of 42 ST167 *bla*_{NDM}-bearing *E. coli* in NCBI nr database and this study.

| Strain | BioSample | Host | Source | NDM-type | Region |
|----------------------------|--------------|--------------|--------------|----------|-------------|
| 51008369SK1 | SAMN09381942 | Dog | wound liquid | NDM-5 | Switzerland |
| ECOL-18-VL-LA-PA-Ryan-0026 | SAMN11230749 | Dog | trach wash | NDM-5 | USA |
| FDAARGOS_434 | SAMN07312478 | Homo sapiens | Rectal | NDM-5 | Canada |
| CRE1493 | SAMN06198937 | Homo sapiens | Rectal Swab | NDM-5 | Shenzhen |
| ECONIH6 | SAMN05341196 | Homo sapiens | swab | NDM-5 | USA |
| AR_0150 | SAMN04014991 | - | - | NDM-5 | - |
| AR_0151 | SAMN04014992 | - | - | NDM-5 | - |
| AR_0149 | SAMN04014990 | - | - | NDM-7 | - |
| AR_0162 | SAMN04015003 | - | - | NDM-7 | - |
| Y5 | SAMN04299569 | Homo sapiens | urine | NDM-1 | Zhejiang |
| AR435 | SAMN07291528 | - | - | NDM-1 | - |
| M217 | SAMD00059754 | Homo sapiens | blood | NDM-5 | Myanmar |
| CREC-629 | SAMN07944243 | Homo sapiens | urine | NDM-7 | South Korea |
| ECWJ1 | SAMN09435562 | Homo sapiens | urine | NDM-5 | Zhejiang |
| 163 | SAMN13951917 | environment | - | NDM-5 | Switzerland |
| 164 | SAMN13951916 | environment | - | NDM-5 | Switzerland |
| 100 | SAMN11872785 | Homo sapiens | Urine | NDM-5 | Italy |
| 91 | SAMN11872784 | Homo sapiens | Stool | NDM-5 | Italy |
| 92 | SAMN11872786 | Homo sapiens | Stool | NDM-5 | Italy |
| 311 | SAMN11872787 | Homo sapiens | Stool | NDM-5 | Italy |
| L665 | SAMN10219249 | Homo sapiens | feces | NDM-5 | Zhejiang |

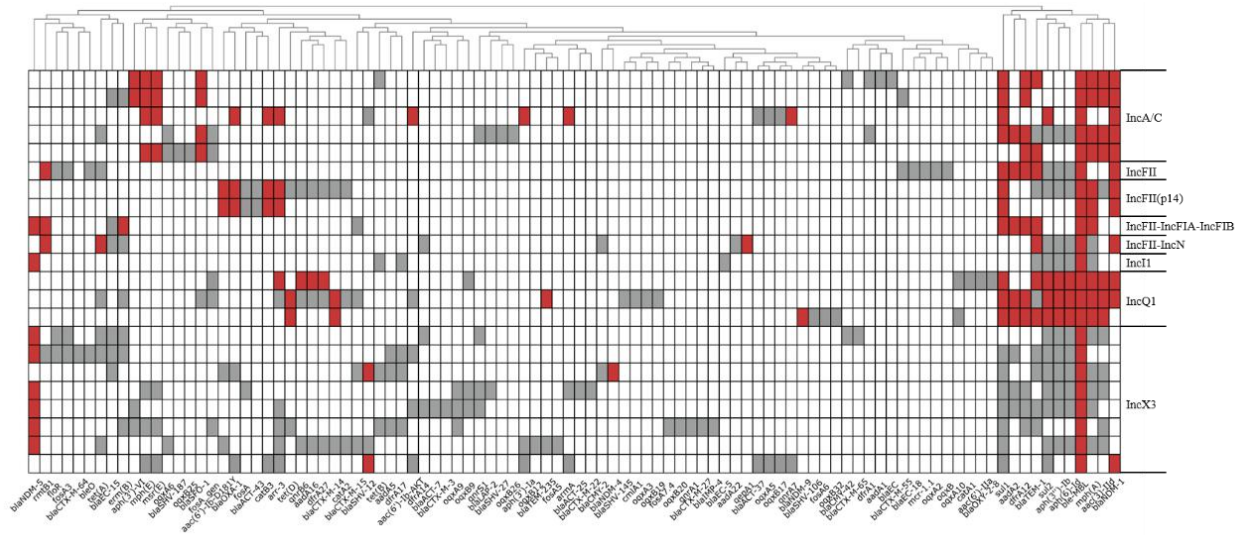
| | | | | | |
|-------------|--------------|--------------|---------|-------|----------------|
| L612 | SAMN10219248 | Homo sapiens | feces | NDM-5 | Zhejiang |
| L610 | SAMN10219247 | Homo sapiens | feces | NDM-5 | Zhejiang |
| L743 | SAMN10219253 | Homo sapiens | feces | NDM-5 | Zhejiang |
| 947385799 | SAMN04011432 | Homo sapiens | urine | NDM-5 | South Africa |
| 52148 | SAMN14421542 | Homo sapiens | urine | NDM-5 | Czech Republic |
| EC-13-30 | SAMN20568146 | Homo sapiens | secreta | NDM-5 | Zhengzhou |
| EC-13-31 | SAMN20568144 | Homo sapiens | blood | NDM-5 | Zhengzhou |
| EC-13-49 | SAMN20568151 | Homo sapiens | urine | NDM-1 | Zhengzhou |
| EC-14-2-9 | SAMN20568171 | Homo sapiens | sputum | NDM-5 | Zhengzhou |
| EC-14-2-92 | SAMN20568169 | Homo sapiens | blood | NDM-5 | Zhengzhou |
| EC-14-2-94 | SAMN20568170 | Homo sapiens | urine | NDM-5 | Zhengzhou |
| EC-14-54 | SAMN20568164 | Homo sapiens | sanies | NDM-5 | Zhengzhou |
| EC-15-2-1 | SAMN20568196 | Homo sapiens | urine | NDM-5 | Zhengzhou |
| EC-15-2-159 | SAMN20568201 | Homo sapiens | urine | NDM-5 | Zhengzhou |
| EC-15-2-26 | SAMN20568194 | Homo sapiens | urine | NDM-5 | Zhengzhou |
| EC-15-2-5 | SAMN20568172 | Homo sapiens | sputum | NDM-5 | Zhengzhou |
| EC-15-2-56 | SAMN20568184 | Homo sapiens | urine | NDM-5 | Zhengzhou |
| EC-16-35 | SAMN20568209 | Homo sapiens | ascites | NDM-5 | Zhengzhou |
| EC-16-59 | SAMN20568214 | Homo sapiens | tissue | NDM-5 | Zhengzhou |
| EC-16-60 | SAMN20568215 | Homo sapiens | sputum | NDM-5 | Zhengzhou |
| EC-16-7 | SAMN20568203 | Homo sapiens | urine | NDM-1 | Zhengzhou |



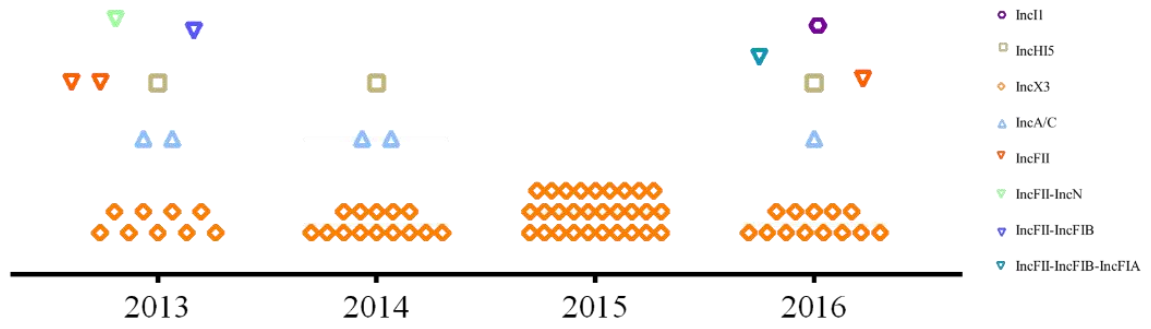
Supplementary Figure 1. Heat map of the resistance genes carried by *bla*_{NDM}-positive strains with whole genome sequences. Red represents the resistance gene carried in the strain.



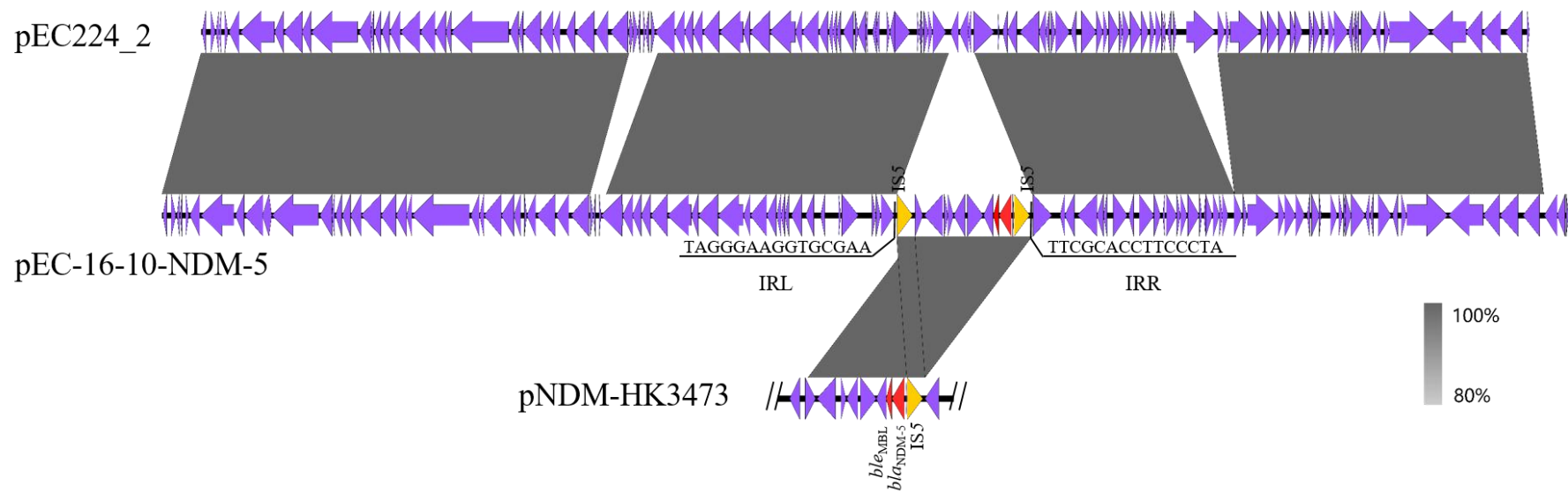
Supplementary Figure 2. Phylogenetic tree of the 42 ST167 *bla*_{NDM}-positive *E. coli* strains analysed in this study and NCBI nr database. Branch lengths and scale bar represent number of nucleotide substitutions per site.



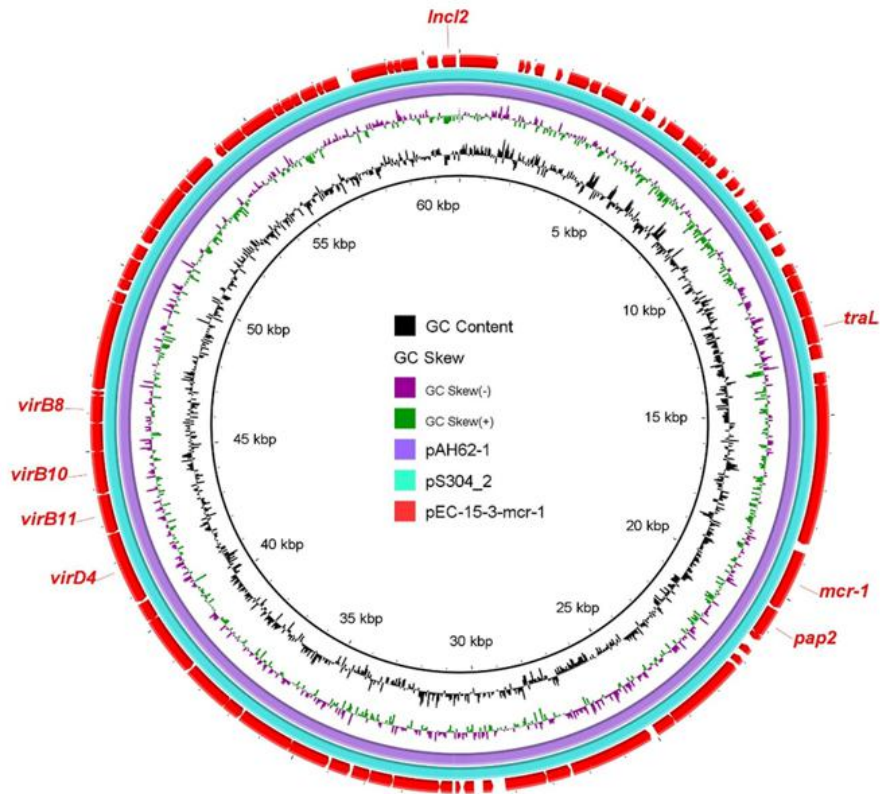
Supplementary Figure 3. Heatmap showing the distribution of AMR genes carried by 22 strains that were sequenced by Nanopore sequencing. Each row in the heat map represents one isolate and grouped by incompatibility types of the *bla*_{NDM}-harbouring plasmids. Red squares indicate AMR genes located on the *bla*_{NDM}-harbouring plasmids. The total red and gray squares in each row represent the AMR in the entire genome of each strain.



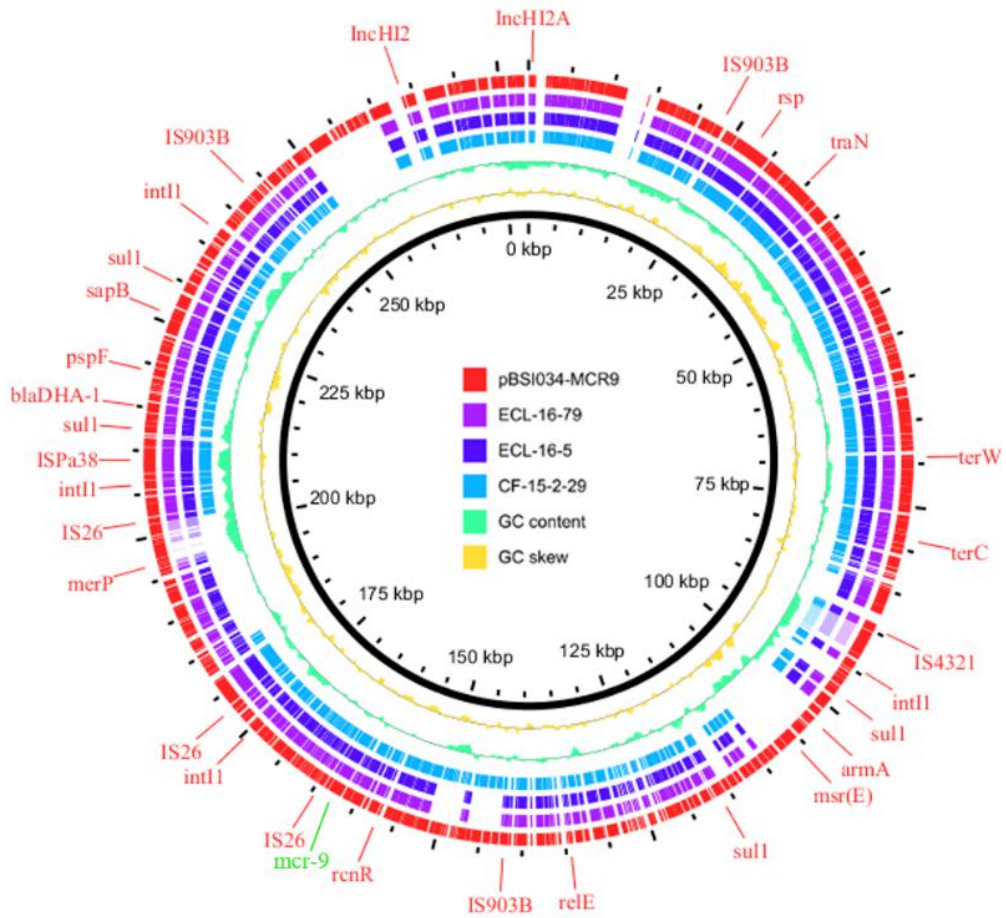
Supplementary Figure 4. Distribution of the replicon sequence types of *bla*_{NDM}-positive plasmids, based on the sampling dates. One point represents one sample.



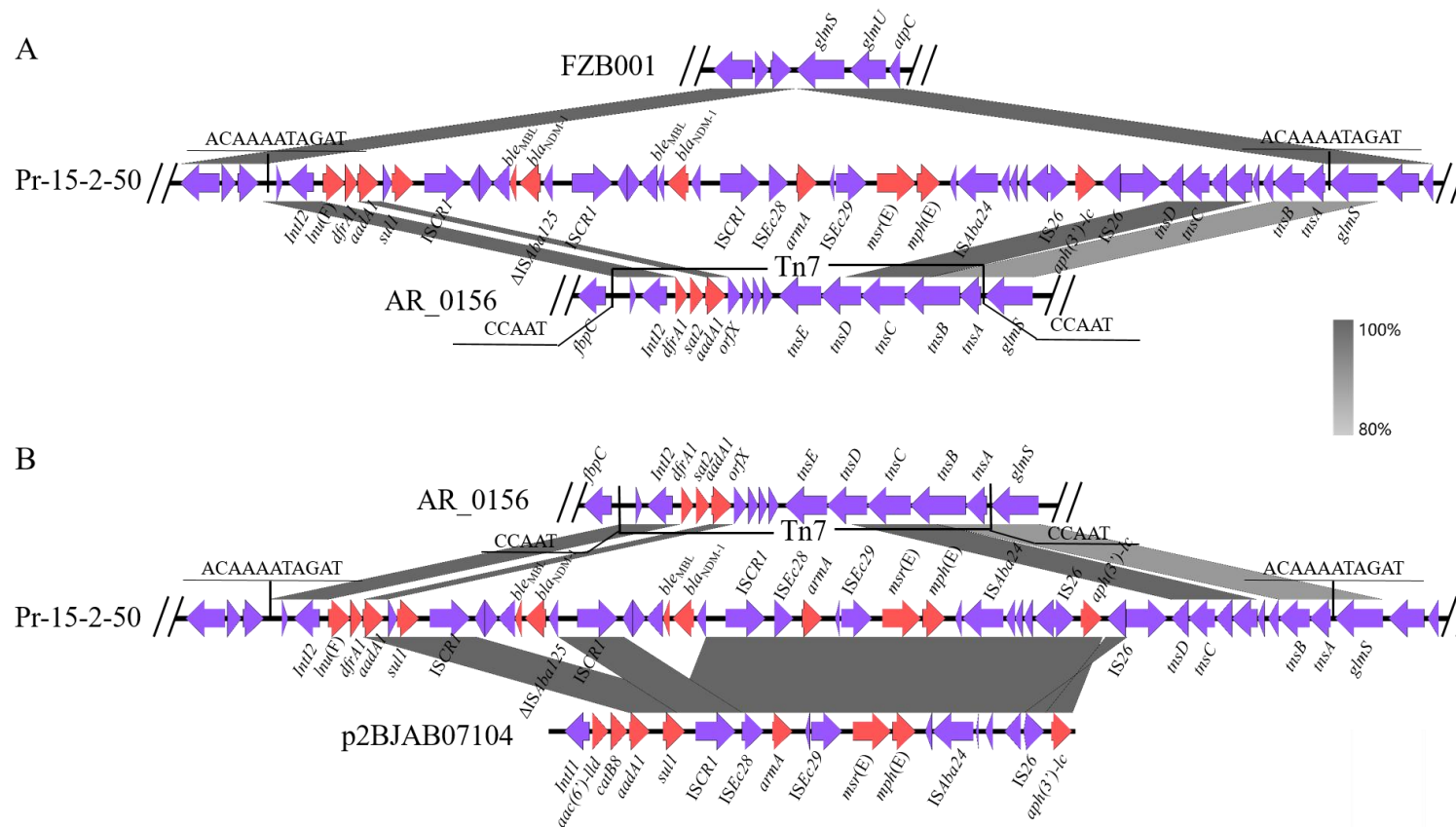
Supplementary Figure 5. Linear comparison of *bla*_{NDM}-bearing plasmids pEC-16-10-NDM5, pEC224_2 and pNDM-HK3473. The gray regions indicate the homologous region between plasmid regions.



Supplementary Figure 6. Circular comparison between *mcr-1*-bearing IncI2 plasmids found in this study and in the online database. The *mcr-1*-bearing IncI2 plasmid pEC-15-3-mcr-1 was used as the reference in the outermost ring.



Supplementary Figure 7. Comparative analysis of the structures of the *mcr-9*-bearing region found in this study and pBSI034-MCR9 (NZ_MN937241).



Supplementary Figure 8. Genetic structure of Pr-15-2-50. (A) Linear comparison between Pr-15-2-50, FZB001 and AR_0156. (B) Linear comparison between Pr-15-2-50, AR_0156 and p2BJAB07104. The gray regions indicate the homologous region between plasmid regions.